

THE CULTIVATOR.

TO IMPROVE THE SOIL AND THE MIND.

NEW SERIES.

ALBANY, SEPTEMBER, 1851.

VOL. VIII.—No. 9.

AGRICULTURE OF OHIO—No. 2.

BY W. G. EDMUNDSON.

ON THE CULTIVATION AND MANAGEMENT OF MAIZE.—Next in importance to wheat, is the corn crop of Ohio. The annual production of this crop ranges from 70,000,000 to 80,000,000 bushels, a very large portion of which is fed to cattle, hogs and horses, and other domestic animals. The actual money value of the corn grown in Ohio, for a series of years, doubtless far exceeds that obtained for the wheat crop for the same period. A superficial observer, might not be willing to admit the correctness of this opinion, but its truth may be conclusively shown. Corn is never known to fail, and on land at all suited to its culture, by proper management, the average product will not vary more than twenty-five per cent, in any single year, although it may be considered unfavorable for the crop. Wet seasons, that are greatly to the prejudice of the wheat crop, are very favorable on most soils for the production of corn. Wheat, in periods of about five years, proves so great a failure that it does not pay the farmer the cost of production; and anything like a full paying crop cannot with confidence be expected more than every alternate season. Two good crops may come in succession, but the two succeeding ones will most likely be failures to a greater or less extent. This statement, strange as it may appear to many, can be fully borne out by facts, yet it by no means proves that Ohio is not a good country for the production of wheat. It only goes to show, that corn is less subject to casualties than wheat, and that in a financial point of view, it is more reliable, both to the grower and exporter. If it had not been for the eighty odd millions of bushels of corn that was grown in Ohio in the summer of 1849, no possible effort on the part of her citizens could have prevented a serious financial crisis. That year the wheat crop proved a total failure in at least one half of the counties, and scarcely sufficient was raised to supply the rural population with bread-stuff, much less the citizens of the cities and towns. The commerce and credit of the state relied mainly upon corn, pork, beef, wool and dairy products, and the latter being greatly dependant upon the former of these great leading products of the country, it may fairly be inferred that in this instance at least the corn crop saved the state, or at least its commercial interests, from bankruptcy. So important an interest then, as the one under consideration, must necessarily be carefully discussed, and in order that the reader may not be deceived by a

mere show of favorable figures, the dark as well as the bright sight will be exhibited.

Unlike any of the eastern states, the rivers with their branches in Ohio, are proverbial for the great extent of the rich valleys they afford. These valleys are eminently adapted for the growth of corn, grass, and even wheat and clover. No conception can be formed of the extent and fertility of the valley lands of this state, by persons who have never personally seen them. The Miami and Scioto valley are each upwards of one hundred miles in length, and from one to eight miles in breadth. The country adjoining those rivers right and left, is washed by streams or smaller rivers that have each almost innumerable branches, all of which have rich bottom lands ranging from one-fourth to one mile in breadth. The same applies to all the other rivers of the state, and the sum total of the area of this description of soils must equal at least one-fifteenth of the entire cultivated lands of Ohio. As a general thing the vegetable mould on the surface averages about fifteen inches, below which is a deposit of clay and sand-loam, of from three to five feet, resting upon a strata of lime, and sand-stone gravel, the latter being entirely dependant upon the character of the primitive rocks, that prevailed in the region of country, where those rivers and streams are located. Some of the rich bottom lands are not underlaid with gravel, but rest upon a stiff clay, unfitting them for wheat and clover, and on such soils only corn, grass, and oats are grown. By far the greater portion of the intervale or bottom lands of Ohio, are of the description first mentioned, and in consequence of the porosity of the subsoil and the draining influence of the gravel, it may be worked much earlier in the spring than ordinary upland, and the wheat and clover plants are less liable to be injured by winter and spring frosts, than on soils whose elevation and constituent properties, would entitle them to the appellation of first quality of soils for wheat, clover, and other small grains. On this account, in connection with the ease with which they are plowed and cultivated, valley farms bring a much higher price in the market than any other description of lands. Good farms of the kind described cannot be had, within a convenient distance for market, in any of the old settled counties of the state, for a less price than from \$25 to \$50 per acre, according to the buildings and other improvements.

Corn, as has already been stated, forms the great staple among the farmers who cultivate the rich alluvial soils of Ohio. In many cases as high as thirty crops of corn

have been grown upon the same field, and the last crop was as productive as the first. So fertile was the soil of many portions of Ohio thought to be, at the early settlement of the country, that the opinion pretty generally prevailed, that its reproducing powers could not be exhausted. Consequently, methods of cropping were adopted at the start, which were calculated to extract the fertilizing properties from the soil, without restoring any of the requisite elements for the reproduction of those crops, and hence, except under very favorable circumstances, a deterioration in the quality and value of those lands has been gradually produced, greatly to the pecuniary loss of the land owners. In some instances an enlightened system of cultivation and rotation of crops is practiced, but we regret that the masses of the Ohio farmers have yet to learn by bitter experience, the importance of nursing rather than skinning their lands.

As far as the eye can stretch in the distance, nothing but corn and wheat fields are to be seen; and on some points of the Scioto Valley, as high as a thousand acres of corn may be seen in adjoining fields, belonging to some eight or ten different proprietors. From one to two hundred acres of corn are grown by the rich landed proprietors of the Scioto and Miami valleys, and, with only one plowing previous to planting, and some three stirrings with a shovel plow, an average crop of from fifty to eighty bushels per acre, may confidently be expected. This large yield, with the trifling amount of labor expended, and the result being comparatively free from risk and contingency, all combine to make the corn crop a favorite one among those who possess soils eminently adapted for its growth. Where the practice prevails of growing corn in succession for many years, without allowing any other description of crop to alternate, the soil becomes overrun with annual weeds, which attain a great growth during the month of August and the early part of September, so that by the time the crop is ripe, the ground becomes matted with weeds fully knee high, and before the setting-in of winter, the seed of those weeds becomes matured, and the following season are equal, if not a greater annoyance, than the previous year. This difficulty is thoroughly obviated by some farmers, who adopt a rotation of crops suited to effect that purpose. The ordinary management given the corn crop, not only brings the land to the finest tilth, but completely eradicates all kinds of grasses and weeds; so that when the crop is laid by, as it is termed, which is done in the month of July, no species of summer-fallow could better prepare the ground for wheat. About the last of August, or first week in September, many sow their corn ground with wheat, and cover the seed with a steel tooth cultivator or shovel plow. Others cut up the corn and shock it up in rows across the field, about 15 or 20 yards asunder, and then plow up the ground between those rows, and sow it with wheat, leaving strips of some eight or ten feet wide, on which the corn was shocked, to be sowed with oats the following spring. Of the two systems, the latter is most extensively practiced, mainly on account of the inconvenience experienced in sowing and covering the seed amongst a crop that is very subject to fall down when the ears begin to get heavy. Where it can be done, the plan of

sowing wheat among the standing corn, is preferable to waiting till the crop is harvested, on account of the late period the wheat is sown when this plan is adopted.

The early varieties, such as find favor in the east, are rarely to be found in Ohio. In some instances, a large variety of the eight rowed yellow corn is cultivated for the purpose of preparing the ground for wheat, in which case it is harvested by the middle of September, and the whole of the ground is cleared of the crop, and sown with wheat the latter part of September. This plan, however, is only done on a small scale, and by those farmers who simply grow corn sufficient for domestic consumption. In almost every instance, the dented varieties of corn are grown by those who make corn growing a leading department of their business. These varieties grow at least twice as tall as northern corn; have a much stronger stalk; are not very subject to suckers; have but few ears on a stalk, and those of large growth, and when thoroughly filled and ripened, the birds and squirrels do not damage the crop to the same extent that is done to the small varieties. The ears take a position on the stalk from 3 to 5 feet from the surface of the ground; and not more than two ears per stalk are obtained, even by the most thorough cultivation and liberal manuring. The rows are placed from 3 to 4 feet asunder, in opposite directions across the field, so as to admit the crop being cultivated by the shovel plow, corn plow, or steel tooth cultivator, as the case may be, and from three to four stalks are allowed to grow in a hill. Ordinarily, the crop is worked four times, beginning when the plants are only a few inches high, and ending when the stalks are some two or more feet high; but in some instances even the fifth and sixth horse-hoeing is given the corn crop, which is mainly done to improve the condition of the land for the succeeding wheat crop. On the rich valleys, however, two, and at the outside three dressings, with the one horse, or shovel plow, is all that is required to obtain a full average crop of from 60 to 80 bushels per acre; and hence a less amount of labor is required, than would be necessary on thin upland, to bring about the same result. When the expense of manuring upland is taken into the account, the labor necessary to obtain say 60 bushels per acre, is fully twice as much as would have to be expended to secure the same result on ordinary bottom land. It therefore, must appear obvious, that those who are in possession of land naturally adapted for the growth of corn, can produce it at a much cheaper rate than those whose soil is better suited for the growth of wheat and clover; and as evidence of this, the fact need only be mentioned, that the valley farmers, who cultivate corn entirely, are becoming very wealthy, whilst those who engage in the business extensively on their upland, are not more than barely paid for their labor. The whole matter is easily explained. The average product on the rich alluvial soils is 60 bushels per acre, costing in labor, one plowing, and two or three dressings with the shovel plow; whilst on the high, thin land, the yield is about thirty bushels per acre, costing in labor fully twice as much as on the former description of soils. The difference does not end here, from the fact that the bottom land contains the requisite food for the corn plants to produce from 20 to 30 consecutive crops, averaging from 50 to 100 bushels per

acre, according to the amount and kind of labor expended upon it in its cultivation; and, on the other hand, a naturally rich wheat soil will yield only some 8 or 10 crops of corn in succession, averaging from 30 to 50 bushels per acre, according to circumstances, unless a liberal dressing of barn-yard manure be applied to it, in periods of from two to three years.

In very many cases the corn crop is fed on the ground to beef cattle and hogs. This practice prevails more extensively in the southern portion of the state than in any other. At first sight the system appears slovenly and wasteful, but it really possesses some favorable features that deserve consideration. By feeding the crop on the ground to horned cattle and hogs, the latter pick up and consume what the former would destroy and tread under foot, and the whole crop, including corn, leaves, and most of the stalks, are masticated by the animals, and converted into a liberal supply of the very best kind of manure for the corn plants. When the interest of land, taxes and cost of production are carefully computed, the actual cost of a bushel of corn on the valley lands does not exceed 12½ cents per bushel; and in favorable seasons will not equal that sum. At the prices that beef and pork brought in the market the past and present seasons, corn judiciously converted into beef and pork on the principle adverted to, would pay from 25 to 35 cents per bushel. This is a full average price for corn in Ohio, and by feeding it on the ground the labor of cutting up the crop, husking and cribbing it, and drawing it to market are avoided, and besides the ground is improving rather than being exhausted, as would be the case by the common process. The number of cattle fed and driven to the eastern markets, in the district of country lying south of the national road, average annually some 30,000, a very large portion of which are first fed on grass till tolerably well fattened, and then put on corn in the manner described during the fall and winter months till spring, when they are driven in droves ranging from one hundred and fifty to two hundred head in a drove. The largest feeders drive from four to eight hundred head per annum, and the business to present appearance will yearly become better, as the facilities for getting to the eastern markets become increased.

There are many things to admire and a still greater number to deplore in the methods of cultivation adopted by the corn growing farmers of Ohio. They have well learned the secret of extracting from the soil, its fertilizing properties. This they do by deep plowing and by frequently working the corn with the one horse plow, or shovel plow. But when we have said this on the favorable side, but little more can be added, unless an expose be made of the wretched barbarous systems that very generally prevail, which have the result of impoverishing the soil, without giving any adequate return to the proprietor of the land for the money and labor expended in the operation. Happily a better state of things may be expected through the instrumentality of agricultural societies and papers, and also from the example of the few enlightened farmers that are dotted over the country, exciting an almost magic influence on the minds and practice of their neighbors.

The plan of growing corn, wheat and oats for a series

of fifteen or twenty years on the same soil, without allowing a clover crop, a naked fallow, a root crop or a liberal barn-yard manuring to alternate—to say the least of it, deserves no better name than wretchedly bad farming. This or other plans equally obnoxious, find favor and are extensively practiced in many portions of this great and flourishing agricultural state. The average annual agricultural products of this state, might be constantly on the increase by adopting a rational system of culture and rotation of crops, without increasing the cost of production. The quantity of corn and wheat cannot be greatly increased by the present system of farm management, even including what are raised on new lands brought into cultivation; but a great danger exists of a rapid decrease, which can only be avoided by the adoption of improved systems of cultivation that have for their object the improvement and increased production of the soil. The average yield per acre should be sought to be increased, without in the end exhausting the fertilizing properties of the soil, and this object once generally accomplished, will entitle this to be the first agricultural state in the union.

Poultry and Poultry Books.

A TREATISE ON THE HISTORY AND MANAGEMENT OF ORNAMENTAL AND DOMESTIC POULTRY. By Rev. E. S. DIXON; with large additions by J. J. KERR; illustrated with original figures of Fowls, Philadelphia: E. H. BUTLER & Co.

It is not more true that mankind are subject to certain epidemic diseases, than that they are also subject to various excitements of a social and pecuniary nature. The commercial world has had its speculative manias, which have at times deeply occupied public attention, and have been seriously disastrous to the fortunes of individuals. Thus England has had its "Darien" and "South-Sea" schemes, its "Railway Mania," &c.; France its "Mississippi Scheme," and Holland its "Tulip Mania." America is not less subject to such excitements, and they have been extended more to the agricultural community, than in the old world. Hence, at different periods we have had the "Merino Fever," the "Down East" and other land "Fevers," the "Multicaulis Fever," the "Berkshire Fever," and lastly, the "Hen Fever," which, to some subjects, will probably be worse than the "Chicken Pox."

It is not to be maintained, however, that the consequences of these excitements, though in many instances highly injurious, are entirely without benefits. They have, in various instances, established important facts; and, though the lesson has been dearly bought, it has served to teach many the distinction between "good and evil," in regard to subjects of which they had previously but little knowledge. Thus, the great attention which is now given to poultry, may prove of more or less benefit, by imparting a knowledge of the proper modes of management, and of the characteristics of different breeds. When the peculiarities of each become fully known, people will be better able to select those which will best answer particular purposes; and if the various trials could be properly conducted, and the results recorded, they would form a valuable source of information for the future. But to render these experiments valuable—to develop by them light, which will be useful, either in a physiological or economical view—they must

be conducted systematically, and the results must be placed in an intelligible form.

The eagerness of our people to acquire information on this subject, is shown by the avidity with which they have seized the various effusions in the department of poultry literature, which have appeared within the last eighteen months. No less than *five* different poultry-books have been published in America during the last and present year, besides several editions of former works, and the importation, to a considerable extent, of several of British origin. The character of most of these books, is by this time pretty well understood by the public. A prominent object with most of the American authors, has evidently been to extol the value of certain varieties of fowls, which either are, or are represented to be, rare in this country. This has stimulated the demand for such fowls; a desire to obtain the fowls, or to learn what they are, has induced the purchase of these books, and the books have induced the purchase of the fowls. How long a profitable trade of this kind can be carried on, cannot be foretold. As to the trade in the books, much, doubtless, depends on the accuracy of their descriptions, and the general truthfulness of their contents; for it is not to be doubted, that in this, as in other business, the sequel will prove that "honesty is the best policy."

But to proceed to a notice of the work whose title appears at the head of this article. The reader is led to suppose from this title, that the work comprises not only that of Mr. Dixon, but that it has "large additions" besides. The same idea is held out in the preface. It begins thus: "In offering to the public Mr. Dixon's Treatise 'On Ornamental and Domestic Poultry,' the Editor begs to submit a few preliminary remarks." The editor, Dr. Kerr, then goes on to say, that he had been induced to engage in the work because the public had "seemed pleased with occasional articles" he had written on poultry, with the signature of "Asa Rugg." On "carefully consulting" the various treatises on poultry, he says, he "came to the conclusion that the Rev. Edmund Saul Dixon's work on 'Ornamental and Domestic Poultry,' was decidedly the best. I [he] determined, therefore, instead of adding *another* book to this branch of Natural History, merely to edit this, adding portraits of the most important fowls described," &c.

After all this from the title page and preface of Dr. Kerr's book, persons who have read Mr. Dixon's, will be surprised to find that the two books have comparatively little resemblance. In fact, the former is less a copy of the latter than is Mr. Browne's Poultry-Book,* in which Mr. Dixon's is only *incidentally* acknowledged. Dr. Kerr has not even followed Mr. Dixon in his general arrangement; but has in several instances given names of breeds not recognized by Mr. D., and has changed the names as given by the latter, in such a way as to completely nullify and contradict his statements. Thus Mr. Dixon forms into one family, called *Hamburghs*, the varieties known as *Bolton Greys*, *Bolton Bays*, *Creoles* or *Corals*, &c., *none of which have top-knots*—all the latter being comprised by him under the name of *Poland Fowls*,—as *Black Polands*, *Golden Polands*, and *Silver*

* The American Poultry-Book. By D. J. Browne, New-York, 1850.

Polands. He says "Certain fowls with top-knots are called by the above names, sometimes also *Polanders*." It is proper to say, in passing, that Mr. Dixon's arrangement in regard to *Hamburgh* and *Polish* fowls, agrees with that of the London Zoological Society, and the Birmingham Poultry Association. Dr. Kerr, on the contrary, begins his chapter on *Hamburgh* fowls, by saying that the *Spangled* have "large top-knots, colored instead of white, and the black and conspicuous muffle or ruff on the throat and under the beak." And, as if to confuse and perplex the reader, he inserts, in the midst of Mr. Dixon's description of the *Hamburghs*, (the chief part of which he copies,) a cut of these top-knot and muffled fowls! Could anything be more absurd than this perversion of the language and meaning of an author? Indeed, after a pretty thorough examination, it is difficult to discover any better reason for the use of Mr. Dixon's title by Dr. Kerr, than the advantage which would be afforded by the popularity of Mr. D.'s book. It is true that Dr. Kerr has extracted much from Mr. Dixon's book, as well as considerable from others—in some instances perverting the sense and in others omitting the requisite credit—* though none of the authors he has thus pillaged will be desirous of standing god-father to Dr. K.'s bantling. But Mr. Dixon's particular opinion of his namesake has not yet transpired. It seems, however, that Mr. Dixon, when he wrote his book, was not entirely unacquainted with the compiler of the work under examination. At pages 293, 294 of Mr. Dixon's second edition, an extract is given (in a note) from a letter signed "J. J. K., Kensington, Philad: N. America." This letter describes two importations of fowls said to have been made "direct from Shanghai." Mr. D. remarks, in relation to the difference between the fowls of these importations, as described in the extract, that the "learned poultry fancier" would probably turn the difference to good account. "The name of *Cochin-China*," says Mr. D., "is appropriated to the first variety; 'Shanghai fowls' may with advantage be given to the second." Now just what is here given as a prediction, has been done—fowls from Dr. Kerr's two importations "direct from the city of Shanghai," having been exhibited at the last Boston poultry-show as different breeds—the one "*Cochin-China*" and the other "*Shanghai*." The names of the exhibitors can be given, if necessary. It is fair to say, however, that they probably gave the names by which the fowls came to them from Dr. Kerr.

This accommodation to circumstances is in some degree explained by the fact, that some of the Boston "fanciers" regard the *Cochin-China* and *Shanghai* fowls, as distinct breeds. Their savans have taught that this distinction consists in the legs of the former having no feathers on them, while those of the latter are feathered. This distinction is attempted to be set up by Dr. Bennett and Mr. George P. Burnham. (See Bennett's Poultry-Book, pp. 33, 34, and Dr. Kerr's book, pp. 148, 149.) Dr. Bennett, indeed, argues that the *Shanghaes* and *Cochin-Chinas*, come from very different countries—

* In Dr. Kerr's chapter on the game fowl, he copies several pages from Nolan's work on poultry. He says before beginning to copy it that he takes "the following" from a "work recently published in Ireland." This is all the credit, and there is nothing whatever to show how much was meant by "the following."

the former, he says, "from the mountains in the extreme north of China"—"the Cochinchina originates in a country of that name, in a more southern latitude." And he raises the hypothesis, that "nature may have provided the Shanghae fowl with feathers upon their legs and feet, as a protection," which "protection" is thought to be unnecessary for the Cochinchinas in their native climate. This, Dr. Bennett says, is his "opinion;" but he complains that "many poulterers declare, spite of 'feathers or no feathers,' that their fowls are 'Cochinchinas' or 'Shanghaes'—just as they please"—adding, that he finds in many instances, "a decision on this point depends entirely upon which particular kind you want to buy." [p. 34.]

Perhaps Dr. Kerr could inform the public whether any such motive as that hinted by Dr. Bennett in the expression last quoted, had any influence in giving the names of "Cochinchina" and "Shanghae," to his two importations, which he says were "direct from the city of Shanghae."*

But on perusing the preface to the work whose title is at the head of this article, the reader will be led to believe that Dr. Kerr has formed a determination to have nothing more to do with this nonsensical twaddle of fowls, being sometimes Shanghaes and sometimes Cochinchinas, for in a note on page 10, he says he "is quite confident that the fowl described in English treatises on poultry as the Cochinchina, is, when pure, identical with our thorough-bred Shanghaes." But as we proceed in examining the work, we find he by no means relieves himself from these inconsistencies. His sixth chapter is headed "Varieties of the Shanghae Fowl," and his seventh "The Cochinchina Fowl." The former opens with four figures, said to be "portraits of Dr. Kerr's Shanghaes"—three have, and one has not, feathers on the legs. Next, in the same chapter, we have "portraits of Mr. E. R. Cope's Shanghaes" which it is said were imported in April 1850, "direct from the city of Shanghae." There are three figures, none of which have any feathers on the legs. In the chapter on "Cochinchina Fowls," we have "portraits of Mr. E. R. Cope's Cochinchinas," said to have been procured "last summer" (1850) of Messrs. Baker, of London. They are thickly feathered on the legs. Next, in this chapter, we have figures of Mr. G. P. Burnham's "Cochinchinas," and another plate entitled "Mr. G. P. Burnham's Royal Cochinchina Fowls," all of which are represented without feathers on the legs; and several pages from Mr. B.'s pen are inserted, in which he labors to prove that there is a "distinct" difference between

* There is some mystery in the accounts of the importation of Dr. Kerr's fowls, as given by him and by Dr. Bennett. In the extract from Dr. K.'s letter in Mr. Dixon's book, (before referred to) it is said that the two importations were made "in 1847, direct from the city of Shanghae; the one in the American ship *Huntress*, the other in the ship *Tartar*." Dr. Kerr states the same thing in his "additions," (so called,) to the book he has got up, under the head of "Varieties of the Shanghae Fowl," page 126. Now let it be borne in mind that Dr. Kerr acknowledges himself the veritable "Asa Rugg" of Dr. Bennett's Poultry-Book, &c. In that Book, under the head of "Cochinchina Fowl," Dr. Kerr's (alias Mr. Rugg's) fowls, are spoken of as follows: "Of the purity of Mr. Rugg's stock, there can be no question, as they were imported by him, through Mr. Taylor, of New-York, in the ship *Huntress*, in May, 1847, direct from Cochinchina." [p. 42.] As the "doctors disagree," who shall decide whether the fowls came from Cochinchina or Shanghae?

the Cochinchinas and Shanghaes, chiefly in regard to the legs of the former not being feathered, and the latter being, when "pure, heavily feathered upon the legs."

It is hardly necessary to say that whatever distinction some may pretend to make between the Cochinchina and Shanghae fowls, or those known by these names in this country, it is a distinction without a *real* difference. Nothing of the kind is recognized by Mr. Dixon. Neither does he or any other English author on poultry recognize Dr. Kerr's pretended distinction between Malay and Chittagong fowls. It is true, however, that Nolan, an Irish writer, says, though the Chittanong is "frequently confounded with the Malay, there is no doubt of its being a *distinct species*." (!) But it is not worth while to occupy space with this matter, since Dr. Kerr, himself, admits that the very fowls to which he has applied the name of Chittagong, were formerly known, and indeed, are almost every where called Malay. A little attention, however, may be given in relation to what Dr. Kerr says of the Chittagong, and the place he assigns it in his arrangement of breeds. After having noticed what he calls the Malay, and other large fowls of the same tribe, he introduces the Pheasant Malay, the Guelderland, the Dorking, the Spanish, and the Game fowl, (comprising five different chapters,) and then comes to the Chittagong, which forms his fourteenth chapter or division of breeds. Of this fowl he says—

"In and around Philadelphia, we have a large fowl to which the above name has been incorrectly given, as, on further acquaintance, it has proved to be a mongrel, and like most mongrels, comparatively worthless. Until within a short time, it went under various names, as Ostrich Fowl, the Turkey breed, the Big breed, the Booby, the Bucks county Fowl, and even the Malay."

An interesting question here presents itself, viz: whether the fowls described in this quotation as "mongrels, comparatively worthless," are not the same as are figured and described as Chittagongs in Dr. Bennett's book, (pp. 27, 28, 305,) which are there said to have been obtained from "Asa Rugg, Esq., [the '*nom de plume*' of Dr. Kerr] of Kensington, near Philadelphia," and of which it is remarked, "they are, as near as may be, perfect samples of their kind, and excite astonishment and admiration in all fowl fanciers who behold them?"

Again: Dr. Kerr says of these Chittagongs, (in his book, p. 270)—"I once had a *Pullet* of this kind which weighed eleven and a quarter pounds." And under the head of "Cochinchina Fowl," (p. 143,) he says—"I had a *Pullet* once, a mixture of Malay, Cochinchina, and perhaps Shanghae, that, when she came to her first laying, being then about seven or eight months old, weighed exactly nine and a quarter pounds; and when she began to lay the third season, she weighed *thirteen and a quarter* pounds. She then passed out of my hands."

In the appendix to Dr. Bennett's Poultry Book, (p. 305,) is a "portrait, drawn from life," of what is called "Imperial Chittagong Fowl," procured from this "Asa Rugg, Esq., of Kensington, Philadelphia." It is claimed that the original of the figure "is unquestionably the largest hen in America, weighing *thirteen pounds and four ounces*." In the same book, (p. 309,) an extract is given from a letter of the same "Asa Rugg," in which he says—"I have a Chittagong hen, three years

and three months old, which last spring weighed *thirteen and one-fourth pounds.*"

Now, do not these descriptions by Dr. Kerr, and "Asa Rugg," and Dr. Bennett, refer to *one and the same fowl*? Was not the "hen" which these writers called Chittagong, and "Imperial Chittagong," in 1850, the "pullet" which, in 1851, Dr. Kerr says, (in his book, p. 143,) was "a mixture of Malay, Cochin-China, and perhaps Shanghae,"—and was she not of the same stock which, under the head of Chittagong, (p. 270,) he declares is "mongrel, and comparatively worthless?"

From the length to which this article has been already extended, it is impossible to notice the work under consideration as fully as was intended in the outset. There are one or two more points, however, which ought not to be passed over. One is the manner in which Dr. Kerr has put the matter of this book together—it is so *dove-tailed* and mixed, that a person who is not thoroughly acquainted with Dixon's and other works, would not know who to charge, or credit, with the language. First, we have a brief preface signed J. J. Kerr; next Dixon's preface to his first edition, and next his preface to the second edition,—both "condensed." Next we have "Chapter I. The Domestic Fowl," which opens as follows:

"Preliminary to a description of the different breeds and varieties of fowls, some general account of them, and their management, will be appropriate; and I know of nothing better than the following, which I quote from Mr. Dixon. He says, in answer to the question, What is the earliest date of poultry keeping? Nobody knows. My own belief is, that it is coeval with the keeping of sheep by Abel, or the tilling of the ground by Cain," &c.

This is transcribed point for point. Now *what* is "quoted" from Mr. Dixon? Perhaps it will be said "the following." But where does "the following" begin, and where does it end? There is nothing in the book to show—no marks of quotation, no difference of type, nor anything else. It can only be ascertained by examining Mr. Dixon's book. The third chapter, (on eggs,) appears to be entirely from Mr. Dixon, but nothing is said or intimated as to its authorship, and for aught that appears to the contrary, the reader might think it was written by Dr. Kerr. The fourth Chapter, (continuing the subject of eggs,) begins thus: "I have taken some pains to ascertain the best means of preserving eggs." *Who* says this, Mr. Dixon or Dr. Kerr? The book does not tell. True, a little further along it is said—

"Mr. Dixon, quoting Mr. Cobbett, says, 'Preserved Eggs are things to run *from*, not *after*.' Perhaps so, perhaps not, as the case may be. At any rate, many articles of cookery which cannot be made without eggs, are not things to be run *from*," &c.

So it goes on to the end of the chapter. Who, without Mr. Dixon's book, can tell what is quoted from him in this case? Nothing is credited to him except the expression of Mr. Cobbett! So it is all through the book—the examples of this kind of *twistification* are "too numerous to mention."

A large portion of the work consists of letters obtained by Dr. Kerr from persons who own the fowls whose "portraits" are here given. Some of these letters contain useful information; the character of others,

in some respects, admits of neither approval nor apology—at least,

'Immodest words admit but *this* defence,
That want of decency is want of sense.'*

From what has been said, it must not be supposed that it is the intention of the writer to endorse, wholly, Mr. Dixon's *own* book. The present, however, is not a convenient opportunity to speak of that work; it is sufficient on this occasion to say, that whatever defects it may be thought to have in a scientific view, it has a good claim to originality, is written in a chaste and agreeable style, and evidently from honest motives. OBSERVER.

The Milk Establishment of Geo. E. Adams.

EDITORS OF THE CULTIVATOR—When in the city of Boston a few days since, a friend invited me to ride out to Medford, some six miles distant, and look at Mr. Geo. E. Adams' stock of cows, and at his management of the same, for the production of milk for families residing in the city.

Mr. Adams has a well arranged barn, large enough to stable 60 cows, and to hold the hay annually consumed by them. The barn has a floor or drive-way extending through its entire length, with a bay on one side, and on the other side stables for the cows and a scaffold over them. Platform scales are set in the floor near one end of it, for the convenience of weighing loads of hay, and other bulky substances, and for weighing anything else bought or sold. Underneath the barn-floor and stables is a cellar, for the making and storage of manure. The cows are made warm and comfortable in winter, and by means of ventilators in the roof and upper regions of the barn, pure air can be furnished the cows, without subjecting them to currents of cold air. The barn can also be made cool and comfortable in summer.

The stock of cows varies in number from 40 to 60 head; they are mostly bought in the fall, milked 8 to 12 months, and then sold to the butchers for beef, at a price about \$5 per head less than their cost as new milch cows. Some superior milkers are kept along for three or four years, producing calves each year; but as a general rule, it is considered better economy to sell most of the cows for beef at the end of 8 to 12 months, and purchase new milch cows fresh from the country, than to allow them to be in calf, and incur the expense of keeping them while dry.

The cows are pastured about four months of the year, commencing the first of June. They are stabled nights during the time, are milked at evening and morning in the stables, and have green feed, such as clover, corn-stalks, &c. in their mangers, evenings and mornings. The rest of the year they are stabled night and day. Once a day they are turned into a warm shed erected over a well of water with a pump in it, the shed containing a long water-trough, with stanchels in front of it, where the cows are fastened until the stables are cleansed, and until they have drank their fill. Aqueduct water was formerly brought to the barn for the cows, but was found to be inferior to well water because of its greater coldness in winter. Experience has taught that the cows

* In some copies, a portion of page 263 has been taken out, and the hyatus marked by rows of asterisks. On other pages, as 254, 264, words have been changed, or blanks substituted.

must be kept warm in winter, in order that they may be thrifty and give a good quantity of milk.

During the eight months that the cows are kept exclusively in the barn, they are fed upon hay and meal. Twice each day they have a quart of meal a-piece, (in the proportion of three-fifths oil-meal to two-fifths corn meal,) sprinkled upon cut hay, and the whole moistened with water; they are also fed frequently during the day with a little dry hay at a time; twice a day they have a mess of "slops," or, in other words, one quart of meal a piece, each time, (two-fifths corn meal to three-fifths oil-meal) with sufficient water added to make a mess of three gallons measure to each cow. The meal, an hour or two before being fed in this form, is put into a large box, set upon low truck wheels; the water is immediately poured on, and the contents are frequently stirred, so that the meal may become thoroughly soaked and swelled, in which state it is thought to be more digestible, and to produce more milk, than if fed as soon as mixed with the water. A little finely-cut hay is stirred in with the meal and water, to give the mass greater consistency. When this drink is to be given, the box containing it is trundled along on the barn-floor, in front of the stalls, and from a large ladle, holding just the right quantity, each cow receives her mess, in a water-tight manger. The cut-feed is mixed in this same large box, which is moved along from stall to stall, for convenience of feeding. A clock in the meal room indicates the times when the cut-hay and meal, and the "slops" are to be given, and strict regularity of hours is observed in dispensing the same. More milk is obtained from the cut feed and the drink, than could be derived from dry hay and meal: more milk is obtained from feeding part of the meal in the form of "slops," than could be realized by feeding it all upon the cut-hay.

The meal keeps the cows in fine, sleek condition, and in eight to twelve months from the time they are purchased, they are good beef. They are carded daily, and kept perfectly clean. A trench behind them, four inches deep and twenty inches wide, receives the manure and urine, so that the platform or floor upon which they stand, or lie down, is always dry and clean, and so is the walk behind them, beyond the trench, dry and clean. Mr. Adams says, that in consequence of keeping the cows clean, the barn well ventilated, and of dispensing the feed with great regularity, he is seldom troubled with a sick cow.

Exact regularity of time is observed in milking, and the cows average about eight quarts each per day. The milk, as soon as drawn, is taken to a room at the house, and strained into large tin coolers, set in a vat containing ice-water in summer, and cold water in winter, in order to take out the animal heat, so that the milk may be fresh and sweet when delivered in town. The morning's milk is cooled as speedily as possible, and mixed with that drawn the night previous; the whole is then taken immediately to the city in small tin cans, and delivered to customers in two hours' time. All vessels into which milk is put, are daily washed and scoured, and kept perfectly bright and sweet. The milk-room is always neat and clean. The milk sells at five cents per quart in summer, and at six cents in winter.

Mr. Adams, by keeping so many cows, and feeding

them high with meal, is enabled to make a large quantity of very strong manure. In order to preserve its strength, to save all the urine, as well as for convenience of cleaning the stables, he has a cellar under the barn large enough to hold a years' stock of manure. It is thrown into the cellar through scuttles in the stable floor, and about once a month, the heaps accumulating underneath are spread evenly about, and a quantity of loam tipped in, sufficient to cover the manure four inches thick; or, in other words, three parts of loam are mixed with two parts of manure. Before carting the compost out to the fields, it is shoveled over from top to bottom, and so thoroughly mixed as to make it of uniform quality throughout. Without the addition of loam, and the thorough mixture by shoveling over, the manure would be so wet and heavy as to create great inconvenience in loading, carting, and spreading the same, as there is a great deal of liquid manure, in consequence of the cows receiving so much of their food in a wet state.

In addition to the stock of cows, Mr. Adams keeps four or five horses for the distribution of the milk and for work on the farm, and two to four working oxen. It is therefore a great object with him to produce a large quantity and a good quality of hay for the support of his numerous stock. He has 30 or 40 acres of sandy and gravelly land, 20 acres of moist land, and 50 acres of salt marsh, all of which produce hay exclusively. Each field of the dry or upland soil is plowed every fifth year, in August or September. The land is smoothly turned over to the depth of eight or nine inches; thirty loads, or ten cords, of compost to each acre spread upon the furrows and harrowed in; one-half bushel of herds-grass, three pecks of red-top, and ten to twenty pounds of clover seeds sown to the acre, and bushed in; and the surface is then smoothed with the roller. In July of the next season the new seeding is fit for the scythe; and the land produces good crops of hay for five years. For the first year or two, the hay made from the new seeding is principally clover, which is mostly mowed and fed in a green state to the cows, in their stalls. For the remainder of the five years, the hay is red-top and herds-grass, with a mixture of white clover, which comes into the sward of itself. Twenty acres of moist land, lying upon a flat surface between the upland and salt marsh, are never plowed, but are kept in perpetual grass by a top-dressing of twenty-five loads of compost to the acre, every third year. Red-top and white clover are natural to this land, and at haying time a heavy, thickly matted swath of grass rolls from the scythe, which makes remarkably milk-producing hay for the cows. Thirty acres of the marsh produce a good quality of salt hay, and twenty acres, lying low, and being subject to flowage, yield an ordinary quality of hay. In feeding cut hay to the cows, a mixture of salt and fresh hay is given, which is agreeable to them, and promotive of health and thrift.

Mr. Adams raises a variety of fruit. His orchards of the apple, give, in good seasons, from five to six hundred barrels of fruit. There is an old orchard upon the farm that contains some of the largest apple trees I have ever seen; they are very sound and thrifty; their tops spread over a wide surface of ground, and the trees are very productive. The soil in this orchard is kept open

with the plow; it is manured with about twenty loads of compost to the acre every third year, no crop being put into the land; indeed the foliage of the trees is so dense and luxuriant that no crop other than the apple can grow. Among smaller younger trees, corn is sown, in drills, for the production of green feed for the cows.

In a portion of one of the orchards the ground became badly infested with twitch-grass, which could not be killed with the plow. Last year the land so encumbered was fenced off by itself, several bushels of corn sown broadcast to the acre and plowed in, and fifteen or twenty hogs turned into the inclosure. They immediately began to root for the corn, and with the most untiring industry turned the soil over and over again. A few weeks after, corn was again sown and the land plowed and the hogs again rooted it over. Then the operations were again repeated; and this year no twitch grass is seen.

I had but an hour or two spend with Mr. Adams. I should have been glad to have devoted at least a day to an examination of his farming, for I saw enough while there to convince me that he is a very enterprising excellent farmer. I hope to call upon him again, at a time when I have more leisure; and if I do, I will give a more extended account of his farming. F. HOLBROOK. *Brattleboro', July 5, 1851.*

Harvesting Indian Corn.

Various modes of securing this important crop, have been practiced. The most common mode which formerly prevailed in the older settled portions of the Northern States, was to cut off the stalk a few inches above the ear, after the grain had reached a certain stage of ripeness,—usually indicated by the top of the stalk or "tassel," being dead. This is called "topping." The "top-stalks" thus cut off, are, when wilted, bound into small bundles, and afterwards placed in shocks to cure. The corn is left to ripen on the "but-stalks," and when sufficiently dry is harvested, either by breaking off the ear with the husk, or by cutting the stalk close to the ground. These modes are most common, though the corn is sometimes husked on the standing stalk. In the latter case, the stalks are usually cut and stacked or housed, after the corn is gathered. Where the ears are, with the husks, broken from the stalks, cattle are usually turned into the "stalk field" to eat the leaves, or whatever they find that is eatable, and the stalks are left to be plowed in, or to rot on the ground.

In the Southern States a similar mode has prevailed, with the addition of the "gathering of the blades." The latter operation consists in stripping the leaves, by hand, from the "but-stalks," after the corn has been "topped." The leaves are bound in bundles, and form excellent fodder for horses or cattle.

In the Western States, the practice of topping stalks has never prevailed as extensively as in the eastern and northern sections of the country. In the principal cattle districts, the crop is commonly cut and shocked, and fed from shock without being husked. In that fertile region, where corn grows from 12 to 15 feet high, and sometimes higher, it is inconvenient to cut the top-stalks, as the ears are often higher than a man's head. At the same time the large size of the stalk and the great bulk of the

whole plant, render it expedient, in many instances, to cut the crop at the height of two or three feet from the ground. Even then the shocks are tall, and the ears are so far from the ground that the lower part of the shock remains open to the admission of the air. The but-stalks, which are left on the field, are too coarse and composed too much of hard fibre and corky pith, to afford much nutriment to animals. After standing exposed to the frosts and storms of winter, they are either cut off with scythes, or are beaten to the ground by a heavy wood implement drawn over them by horses or oxen, which leaves them in such a situation that they are readily plowed into the soil.

In some instances, in the west, the crop is left entire, to ripen in the field, and the ears when ripe are broken from the stalk. In such cases cattle are turned in to glean the field, and what they leave returns to the soil.

Topping corn is probably less practiced in this country generally, and especially in the northern portion, than formerly. There are several reasons for this. First, a conviction of the loss sustained in the value of the fodder; second, the loss in the weight and value of the grain; third, the liability of the crop being injured while in an immature state, by frost.

All these reasons are important. As to the first, the northern varieties of corn produce numerous leaves below the ear. If the stalk is cut to the ground just as it is beginning to "turn," and is properly cured, the whole is nearly equal in quality to the common top-stalks. On the other hand, the but-stalks being left in the field till the frost has extracted or soured their juices, are much depreciated in value.

It has been proved that cutting off the top-stalk lessens the yield of grain. The public is indebted to Wm. CLARK, Esq., of Northampton, Mass., for several interesting experiments, which have established this fact. The result is, indeed, altogether reasonable, and in accordance with nature's laws in similar cases. What other plant would bear such mutilation without injury? Deprive the vine of its leaves, and the grape is imperfect. So it is with the apple, pear, plum, &c.

We have known no experiments made with direct reference to the comparative value or yield of corn when left to ripen, untouched, or is cut up at the ground and shocked; but it is probable that the superior quality of the fodder by the latter mode, would much more than counterbalance the advantage, if any, in the value of the grain by the former.

We see no reason why the same rule would not apply to Indian corn as to wheat, or other grain. It has been settled in regard to wheat, (and also in regard to rye and oats,) that the grain itself is worth more in the aggregate by being cut before it is dead ripe—even while it is soft and *doughy*—and while the straw has yet a considerable shade of greenness. Thus, the grain is not only of more value,—will make more and better flour,—but the straw is much better food for stock. It is undoubtedly so with Indian corn. It has, in fact, been noticed, that meal from corn that was cured in shock, is sweeter, swells more, and makes more bread than other meal.

It is fair, however, to state in regard to this mode of harvesting the corn crop, that it is sometimes cured im-

perfectly—from the bad manner in which the shocks are made, being packed too closely, or not sufficiently open at bottom; which, if wet weather occurs, occasions the ears, and sometimes the stalks, to mould.

But the advantage of securing the crop against frost, is in some instances one of the greatest inducements to shocking corn. This circumstance may operate with force the present season, as the crop is generally backward, and in some locations can hardly escape danger from frost—unless there should be an unusual extension of warm weather in autumn. As a security against frost, there is no question that putting the crop in shock is preferable to any other mode. Hence it is the course commonly adopted in Maine, and in all sections where the shortness of the summer renders the ripening of corn uncertain. It is the practice there, to cut the crop as soon as the grain is fairly *glazed*. It has been proved that it will cure, safely, if carefully put up in this stage; but if the weather is favorable, and is likely to continue so, it is often allowed to stand a few days longer. Sometimes, if a sudden change in the temperature indicates the occurrence of frost before the crop could be secured in shock, the whole force at command engages at once in cutting it down—throwing the corn in piles of a dozen or sixteen hills each. It is found that a light frost injures the corn but little while it is in this situation, and as soon as the wet is dried off, the following day, it may be put in shock.

But if it should happen that the crop is struck by frost while standing, it has been demonstrated that a less loss will be sustained by shocking it, than by any other mode. The years 1812 and 1816 are memorable from the injury done to the corn crop by frost—the latter season was especially remarkable for the shortness and general unpropitiousness of the summer. Over a large portion of the Northern and New-England states, frost struck the corn while it was “in the milk.” As soon as the injury was ascertained, (and it was seen the morning of the frost,) the farmers set themselves to save as much of their corn as they could. Various plans were tried; such as cutting up the corn and tying it across poles, put up for the purpose, the ears downward; breaking off and husking the ears, and drying them on scaffolds or stagings; stripping down the husks and leaving the ear exposed to the air, on the stalk; cutting up the corn at the ground and placing it in small shocks.

The latter succeeded best of all the modes mentioned—especially where the work was done *immediately* after the frost. In 1836, the corn crop was much injured by frost, in many places. A writer in the *Genesee Farmer* of that year, describes the effects of topping and shocking, as practiced with two fields of corn, as follows:

“We knew of two pieces of corn, owned by the same individuals, planted nearly at the same time, and both equally promising when their progress was stopped by the frost of the 5th of September. One of the pieces was immediately topped, and the other was, as soon as possible, cut up by the bottom and shocked. They were both husked a short time since, and the owners assured us that contrary to the expectations of many who witnessed the different modes of curing, they should get at least one-third more sound corn from that which was cut up, than from that which was topped and left on the mill.” [Vol. VI, p. 370.]

Show of the Royal Agricultural Society.

LONDON, July 15, 1851.

EDITORS CULTIVATOR—The Royal Agricultural Society's Show is now in progress here, and there never has been an exhibition equaling it in cattle, sheep and swine; and in horses, it has, 'tis said, but once been excelled. The Short-horns and Devons were out in great force, and I never have seen, before this, what to me was a fair exhibition of these two important breeds of cattle. The show of Herefords and of Scotch cattle, is small. In the Short-horn class, the show of two-year-old and yearling heifers, exceeds anything I have ever conceived of. They are far superior to the aged class, showing that in this breed of cattle there is no deterioration, but a constant progress—and I may say the same of the Devons. The show of sheep is truly wonderful. The South-Downs and Leicesters, of course, being pre-eminent. By the premium list, which I send you, it will be seen that Jonas Webb has swept all before him in South-Downs—every prize being awarded to him, and those who have bred from his stock. He told me, that owing to the awards last year, in which he was floored for once, it became necessary to prepare for the show, and he has done it so triumphantly, that competition was out of the question. I have never seen anything that compares with his prize rams and ewes. The show of swine is truly wonderful. Never, before, have I seen an exhibition so extensive, and so good. The number of swine, it seems to me, is equal to the cattle and sheep. There are many very superior breeds on exhibition; but after a careful examination, I am decidedly of the opinion that the *Berkshires* are the best for us,—and was I to import swine to our country, I should select them in preference to any others. They have a monstrous breed here from Yorkshire—a white hog, which attains enormous size, and has mainly, I think, carried off the prizes in the large class—but I think them altogether too large, although they lay on fat finely. The horses are many of them very good—the hunters and carriage horses, especially—but the number of inferior stallions and mares is quite equal to what is seen at our shows.

The fatness of the stock is truly surprising, and the prizes were awarded to fat, and not to character, in many instances, if not in all. The aged bulls in the Short-horn class, to which the prizes were awarded, are entirely unfit for breeding purposes—especially the one to which the 2d prize was awarded, which was a fatter animal than I have ever seen in Smithfield market—more like Col. Sherwood's fat cow exhibited last fall, than a breeding animal. In the class of two-year-old heifers, the premiums were awarded to animals almost equally fat—one of them quite as much so. The best heifer in the yearling class, where the same rule was observed, was passed by the judges with this remark to the herdsman, “*Why don't your master feed his cattle better?*” I saw one of the judges in this class, at the stall of this heifer, with his brother, who is steward of the yard, and who I know to be a capital judge, and he said to him, “can you give any reason why you did not give the premium to this heifer?” and the judge, as they say in racing matters, was “no-where.” I mention these things to show, that even in this country, where there are so many good judges of stock, *flesh*, not *character*,

determines too often the awards, and that a man, if he wishes to get a prize, must make up his mind to ruin his animal for breeding, in order to obtain it.

The first prize in Short-horn cows, awarded, as usual, to Mr. Booth, and I think very justly. His cow was not over fat, though quite enough so, I assure you, but for style, substance, handling, in short everything that constitutes a first-rate cow, in my judgment, she cannot well be beaten. The competition was very severe, and her success certainly gave evidence of very superior merit.

In the Devon class, there was a show that does one's heart good, who delights to look on this superior class of animals as I do. The aged and young bulls were many of them very superior, but I must say, not one, in my judgment, equal to Mr. Morris' bull Major—and they may well be good bulls, and still not equal him, as he is, in my opinion, as they say here, "*capital*." The cows and heifers, however, were most extraordinary—fine handlers, many of them of fine milking developments, and worthy of the attention they received. Mr. Geo. Turner received the first prize for cows, and in-calf heifers, and I can truly say that his stock was very fine. I liked best, take her all-in-all, the heifer of Lord Leicester, to which the 3d prize was awarded, but still I presume the others would, in the opinion of most judges, have received the awards which were given to them.

The show of Herefords was not large. The bulls did not, in my opinion, come up to what they should, but the cows and heifers were excellent. The first prize cow, of Lord Berwick, and the 2d of Rev. Mr. Smythies, (from whom I believe Mr. Sotham purchased some animals,) were very fine indeed; and the two-year-old and yearling heifers were unusually excellent, and well sustained the reputation of this valuable breed.

The arrangements of the ground were excellent—the stock all under cover—a canvass roof to all the stalls made it very convenient and comfortable; we would do well to imitate this. The number of people was less than on the first day of our show—but as the admission was 5s. this will account for it. To-morrow is 2s. 6d. day, when there will be many more—and the dinner comes off to-morrow of which I will give you an account. The mail closes for to-morrow's steamer, and so must I. Truly yours, B. P. JOHNSON.

LONDON, July 16, 1851.

I have just returned from the second day's exhibition of the Royal Society at Windsor, and after a careful review of the whole stock, my impressions are the same as from my first examination. The young heifers in the three leading breeds of the show—Short-horns, Herefords, and Devons—are the great attraction, and they possess qualities, that more perfectly exemplify the perfection of breeding, than any thing I have ever seen. Mr. Lorrillard Spencer, and Mr. Thomas Bell, of Westchester county, were with me yesterday, and Mr. Bell to-day. I made to-day a more careful examination of the swine than I was enabled to do before. As a whole, they are very superior, but the monstrosities, to which the premiums were awarded, especially in the class of large breeds, are truly astonishing. The first premium on boars was awarded to a white boar from Chester, which was so fat as to be unable to rise, but with the

utmost difficulty. That to which the second prize was awarded, was a complete mass of fat—his eyes *entirely closed*, and he was so much overpowered with his flesh as to be unable to rise, and there was a card placed on his pen, "*Do not disturb this boar*." It was offered for sale for £30, for what purpose I cannot imagine, as no sane man would ever expect to breed from him, and for pork, of course, large as he is, he is not worth anything like the sum asked. Now it may be said, as it is said here, this shows the aptitude of the breed to take on fat, and it is therefore right to award premiums for animals in this condition; but if it is desirable to have good breeding animals, if our shows are designed to encourage them, it appears to me self-evident that the animals to which premiums are awarded, should be in a condition to be of service. But another objection, and which I find is fully appreciated by the best breeders and judges of stock here, is, that you cannot fairly judge of the real qualities of an animal in this overloaded condition, and although this may not with so much force apply to swine, still as a general principle it cannot be gainsayed.

In the sheep department, I made a very careful re-examination. The Leicesters, numbered—rams 121, ewes 75—196. The prize animals were truly models of what here is deemed perfection in this breed. The three prizes for yearling rams were awarded to Mr. William Sanday, of Home Pierrepont, Nottingham, and two of the prizes for ewes to the same; and in rams of any other age, the three prizes were awarded to Mr. T. Edwards Pawlett, of Beeston. I examined these prize sheep with much care, and although there were among so many entered, a large number of superior sheep, it appeared to me that those selected for the prizes were truly models for the artist, as well as the breeder.

The South-Downs were shown in great numbers—112 rams and 100 ewes—212. Owing to the fact that the prize last year had been taken away from Jonas Webb, the competition was more than usually animated. The great champion of these truly invaluable sheep, having been beaten by a tenant farmer unknown to fame, excited at the time great surprise, and encouraged every South-Down breeder, to come up to the show prepared to try his chance for the prizes. Mr. Webb, however, was on the ground, with such a display of sheep as really put competition at defiance. He had 25 rams, and taken as a whole, I never have seen that number of rams so nearly perfect—form, symmetry, fleece—everything almost as complete as if prepared by a modeller of the most approved ability. He had also 15 ewes, ten of which received the prizes. They were the admired of the show, and the multitudes who crowded around the pens to-day to view the prize sheep in this class, showed the great interest that this contest has excited.

In the class of *long wools*, as distinguished from the Leicesters, the prizes were all awarded to Cotswold rams and ewes. They were admirable sheep, and in my opinion preferable to the Leicesters. In this class, there were only 79 entered, mostly Cotswolds and New Oxfordshires. The 1st prize ram, owned by Wm. Garne, of Gloucestershire, was a superb animal, and of immense breadth and weight. One only of the New Oxfordshires was commended, but this was a very superior ram and nearly equal in all respects to his competitors. The first pen

of Cotswold ewes, belonging to Wm. Lane, of Gloucestershire, were capital specimens of this breed of sheep.

The *mountain sheep* were Cheviots and Exmoors. The Cheviots were very fine indeed, and the Exmoor ewes, to which the first prize as shearlings was awarded, were unusually good. Under this division was exhibited a fine Shetland ram and 5 pure Shetland ewes. These were great curiosities—very small, with long coarse wool. The ewes were of the size of the small Welsh sheep so famous for their superior mutton, and these I believe are somewhat famous for the same purpose. The ewes were part white and part black—so wild that a net over their pen was required to keep them in the enclosure. The contrast between them and the large Cotswold buck, which would weigh more than all of them, probably, was very striking. A very singular ram was exhibited, entirely black, fine wool, rather smaller than our old Merinos, a cross between the Spanish and Welch sheep.

There were several Merino rams and ewes exhibited with their fleeces, all from Surrey. They were very fair representations of the old Spanish Merinos, had good forms, though rather small—the wool very fine, but quite short, more like the Saxons, much, than our Merinos. This kind of sheep does not meet with much favor here, as the great object is mutton, on which the people live, and the breeders thrive.

In the stock department, there are some curiosities on exhibition. The little Shetland bull mentioned yesterday, is a very fit companion for the Shetland sheep and but a very little larger. A Bramin bull, heifer and calf, in addition to the Roman bull and cow, attracted attention.

The Ayrshire and Alderney or Jersey stock, were very good indeed, and showed the peculiarities of those distinguished breeds, which stand pre-eminent for their dairy qualities. Some of the Ayrshire cows were very fine animals, of much larger size, than usually seen in our country, and although they showed the pure Ayrshire breeding, I could not but surmise, that possibly a trace of the Durham might be found in them. I was much pleased with the Long-horns, although there were only two bulls and five cows and heifers exhibited. One of the bulls to which the prize was awarded, was an animal that, take him all in all, could not have been easily beat in competition with the more popular breeds. The cows developed fine milking qualities; the heifers were very excellent, and I believe, that for some parts of England, the restoration of this breed in its purity, would not be detrimental to the farmers. The cows are now very generally found in all the large dairies; in some instances they are crossed with the Short-horn or old Teeswater, and they are very generally approved. They are a very hardy breed of cattle, attain large size, and although they do not attain as early maturity as the Short-horns, they are long-lived and are a very valuable breed.

I was most surprised with the *Sussex cattle*. When I first passed them, I supposed they were Devons, and I can now account for a race of cattle in our country, which pass for Devons, but which I have no doubt are descended from the Sussex. The cattle of New-England, in many districts, have the characteristics of the Sussex, and I believe a good selection made from these

cattle on exhibition here, might have been imported to the United States, and sold without an objection, to most purchasers as Devons. I met Mr. Bell to-day, at the Sussex quarter, and he expressed his astonishment at these cattle, of which he had never heard. He noticed at once their great similarity to what are called Devons in America, and said he might have been deceived in them himself if they had been exhibited in the Devon class, and offered to him as Devons. At the Maryland State show, a stock of cattle was exhibited from the State of Delaware, called *New-York Devons*. I could not imagine where they came from. But my impression is that they are from the Sussex breed.

These cattle are very much prized in Sussex. They are rather larger than the Devons—probably they are from the south Devon stock, originally. They are generally a shade lighter color, and not quite as fine as the north Devon. They make capital working oxen, good beef, though late to mature, and they claim for them good milking qualities.

The *Scotch polled cattle* were few, and mainly of the Angus breed. They are very large, but develop very fair fattening propensities. When examining the Angus cow, which was remarkably fat, I met a London salesman, who examined her with great care and told me he never met with a more perfect animal for beef, and such, I confess, was my own impression, after a very close examination, though his opinion was of far more importance than mine. Of the *Scotch horned*, there were but few. Two West Highland cows, which showed the purity of that celebrated breed, but no bulls, except quite a young one on exhibition.

THE DINNER.—At 4 o'clock, precisely, the great dinner of the Society, for which 2000 tickets were issued, and all disposed of, came off. It was in a grand pavilion adjoining the show grounds, excellently arranged. Two tier of tables, raised five or six feet above the floor, were arranged on each side of the main hall. At one of them the Duke of Richmond presided—Prince Albert and the Belgian Minister on his right, and Mr. Lawrence, U. S. Minister, and the Mayor of Windsor, on his left. The residue of the tables on the side with the President, were occupied by the invited guests, among whom I was allotted a seat. The opposite raised tables were occupied by the Governors of the Society. Lord Portman, V. P., in the absence, (from illness,) of Lord Ducie, president elect, presided. The tables below were filled up by the members of the Society, and others who had tickets. Mr. T. Bell, one of our delegates, was present. So admirable were the arrangements, that every one had a seat, and every necessary attention. The eating of the dinner was, as you may well imagine, disposed of in no ordinary speed, most of those present not having broken fast since early in the morning. At length the trumpeters, one by the President, the other by Lord Portman, on the opposite side of the hall, sounded the notes for attention, and the Duke of Richmond, after a few remarks applicable to the occasion and to the toast, proposed the health of her Majesty, the Queen, which was received with great applause, as it is everywhere in this country. The Duke is not an eloquent speaker, so far as manner is concerned, but he has great tact in what he says, and in the speeches which he made

during the dinner, gave many capital hits, which elicited rounds of applause.

The next toast proposed, was Prince Albert, Prince of Wales and Royal family, &c. The Duke of Richmond, in proposing the toast, spoke of his Royal Highness as the patron of the Society, and as an example of domestic virtues in all his relations, which had made the home of their beloved Queen the abode of comfort and happiness. The toast was received with great enthusiasm. Prince Albert rose and made some very interesting remarks in answer to the toast. In alluding to the holding the show in Windsor Park—he drew attention very happily to the scene where King John, trembling among his subjects, unwillingly signed that great charter which has ever since been the birthright of Englishmen. Your present sovereign, he said, came confiding among her loving and loyal people—she came to admire the results of their industry, and to encourage them to persevere in their exertions, and the gratification the Queen has felt at the sight of the splendid exhibition, must be participated in by all who see it.

His remarks were received with great applause. The Prince is a fine looking man, very graceful in his movements, and speaks with much readiness—is very self-possessed, and the impression made on those who had not before heard him, was of the most favorable character.

The health of the Foreign Ministers was next proposed, and was responded to by M. Van de Weyer, the Belgian Minister, in a most capital speech, in fact *the* speech of the day. He speaks English without a foreign accent, and his manner was very pleasing. He alluded very handsomely to the agriculture of the Flemings, and paid a tribute to that early improvement of agriculture among his own people, which has placed them high on the lists of agriculturists. He alluded very playfully to the despatches that foreign ministers are now in the habit of sending home. Instead of containing diplomatic despatches, he said, the *red boxes* that are now sent from the minister here to his court abroad, more frequently were composed of matters relating *entirely* to the agriculture and stock of England.

The Duke of Richmond responded very effectively to a toast to his health as President of the Society. Lord Portman made a very good speech in introducing a toast to agriculture, manufactures and commerce. Mr. Lawrence, U. S. Minister, spoke very well indeed, on introducing a toast to the Mayor and Corporation of Windsor. Mr. Lawrence's fine personal appearance, as well as his address, secured for him attention. He alluded most happily to the consanguinity of ties between a large portion of his countrymen and Great Britain; expressed his and their desire, that peace and commercial intercourse should continue. He alluded to the ancient castle near which the great exhibition was held, as dear to Americans from its associations, for the great rights of freedom which had here been secured; and also to Eaton Hall, that ancient seat of learning, from which had come forth so many great and distinguished men in every department, whose fame belongs to America as well as to Great Britain. The Mayor responded to the toast in a few remarks suited to the occasion.

Mr. Miles, M. P., (who, from the applause with which he was received, I conclude is a great favorite with the

farmers,) introduced a toast to the Judges and Stewards of the Show. It was responded to by Mr. Fisher Hobbs. Lord Ashburton proposed the health of the Laboring Classes, and accompanied it with some very interesting remarks. Mr. E. Dennison, M. P., proposed the '*Sister Societies of Agriculture*.' In rising, he was greatly cheered, and I doubt not he is well known to the farmers present. He said the customary toast to the Sister Societies of Scotland and Ireland had always been received with great favor by the Society, but at this time he would present it on more extended considerations—to Societies *wherever* they existed, engaged in the same great work with themselves. He alluded to Germany whose agriculturists and scientific men had done so much for them. He alluded to Lord Stanley as introducing to the British farmer guano, now employing 100,000 tons of British shipping to bring it to our shores. (At the mention of the name of Lord Stanley, who is the candidate of the Protectionists for Prime Minister, the hall rang with cheers, which continued for a considerable time and some difficulty was experienced in restoring quiet. This shows the feeling of this class of the English on this all absorbing question here.) He spoke of the important discovery of dissolving bones in sulphuric acid, as having been made by Liebig, a German chemist, which had proved of so much advantage to the farmers of England, and following up this discovery he said there was present to-day a gentleman from across the Atlantic, whom he had in his eye, (Mr. J., of N. Y.,) who had announced to the Royal Society the discovery of a mineral stratum, in the State of New-York, rich in the same compound as that of bones, and which could be brought to our shores at such a price as to place it within the reach of every farmer. (Prolonged cheers.) (I had presented at the last meeting of the Council of the Royal Society, a sample of the phosphate of lime received from Prof. Emmons, from Crown Point, in our State, and received from the Duke of Richmond a letter thanking me for the same, and expressing himself as very anxious to receive from our country this valuable mineral, should it prove, as it is believed it will, a valuable fertilizer.) Lord Abercorn responded very happily, indeed, in behalf of the Irish Ag. Society. He is an uncommonly fine looking man, and his address very prepossessing. In alluding to the great famine which had brought such distress upon that unhappy country, he said an allwise Providence had overruled it for the good of that Island, and that the prospects of agriculture had never been so full of promise as at present. The Duke of Richmond, in the absence of the Marquis of Breadalbane, responded for the Highland Society, of which he had been President three years. He said, being half Scotch and half English, he claimed the right on behalf of the farmers of Scotland to respond to this toast.

It was peculiarly gratifying to me during this whole meeting to witness the good feeling and the *heartly* applause with which every allusion to the United States was received, and it seems to me, that whatever feelings may prevail elsewhere, among the *farmers* of England, that of friendship and good will to us is most apparent. I have found this everywhere I have been among the farmers, and I cannot doubt that it is truly sincere.

The remaining proceedings were a toast to the Rail-

road companies and a reply, and the health of the President elect.

Thus has closed this annual festival of the agriculturists of Great Britain. The attendance this year was much larger than usual, owing, in some measure, to the favorable location but more to the Great Exhibition, which has brought here so many foreigners, many of whom were present to-day. The show ground was very full to-day, and it was not easy to examine the stock, owing to the crowds pressing around the stalls. Tomorrow, the shilling day, there will be such a rush as we have at our shows, undoubtedly. My engagements at the Crystal Palace will prevent my attendance.

This Exhibition shows, that whatever may be the effect of the present free-trade system in this country, the breeding of stock is certainly making commendable advances. Never before, it is admitted by all here, has there been such an exhibition, for its character as well as numbers, and I cannot doubt that the raising of stock here pays well.

I am greatly indebted to attentions received during the show, from the President of the Society, Mr. Hudson, Sec'y., Mr. Shaw, editor Mark Lane Express, Mr. Fisher Hobbs, Mr. Dennison, Mr. Mechi, Mr. G. Dale Trotter, Mr. Jonas Webb, and others to whom, in behalf of our Society, I desire to tender cordial thanks. Yours truly. B. P. JOHNSON.

The Horticultural Department.

CONDUCTED BY J. J. THOMAS, MACEDON, N. Y.

Cold Grape-Houses.

Twenty or thirty years ago, large importations were made of foreign varieties of the grape, and extensive vineyards planted by some enterprising individuals. But after trying nearly every variety, they were nearly all found quite unsuited to open-air culture, and raising grapes out of doors is now mostly pursued with the American sorts. But the superior delicacy, flavor, and

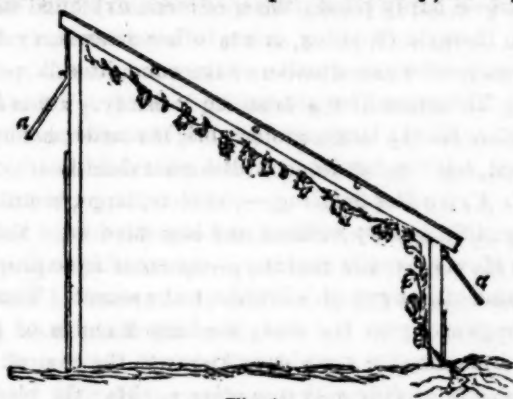


Fig. 1.

sweetness of some of the foreign grapes have saved them from rejection, and of late years cold graperies having been found admirably suited to their successful culture, they are becoming very common. Fire heat being entirely dispensed with, the cost of maintaining these graperies is small. In order to fit them for general use, the buildings themselves should be constructed in as cheap a manner as possible, as this happily has been attained in a remarkable degree.

The cheapest mode of construction, of the many plans presented of late years in horticultural journals, or re-

duced to practice, is substantially the following: The walls consist merely of posts set into the ground, and covered with common rough board siding. This may be whitewashed or painted. The cost of the glass-covering is greatly lessened by the use of *fixed sashes*, made in the simplest manner, the necessary ventilation being effected by means of small board shutters, *a a*, (Fig. 1,) opening outwards on hinges, placed at intervals along the back and front walls. Fig. 2 represents a portion of the glass roof—*b b* are the rafters; *c c* are cross bars made of strips of inch board about two and a half inches wide, set on edge, and narrowed at the rafter and let in to it sufficiently to be on a level with its top. These cross pieces support long slender bars parallel with the rafters, and formed on the top in the shape of a common sash bar, and receive the panes of glass.

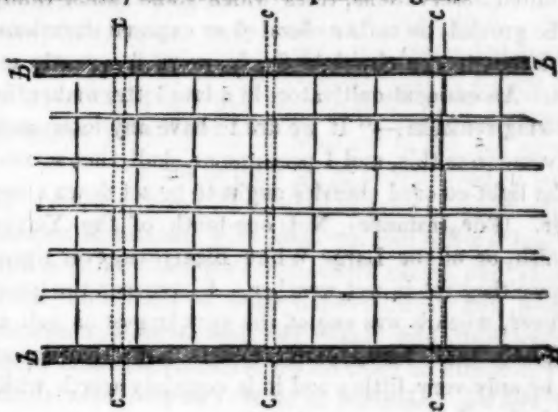


Fig. 2.

It will be at once perceived that the construction of long frames of sash, made to slide up and down the roof, which constitute a large item in the expense of glass structures, is entirely obviated.

The vine border is to be made on the outside of the front, and the vines brought within and trained along the under side of the rafters, within seven or eight inches of the roof.

The main features of this plan of building were published last winter in the Horticulturist, as adopted by T. Rivers of Sawbridgeworth, England, although it is not entirely new in this country.

The American Pomologist.

This valuable and splendid new work,—a large quarto with colored plates,—is edited by Dr. W. D. BRINCKLE, and published by A. HOFFY, of Philadelphia. It is to be devoted entirely to American Fruits, and in this particular occupies distinct ground from any other existing publication. Each number is to contain ten colored engravings, exhibiting the fruit, shoots and leaves of each variety. The attempt has been very successfully made by A. Hoffy, the artist, to represent the specimens in what may be termed their ordinary every-day colors, and not, as is too often the case, marked with more of the brilliancy of paint than of the skill of the artist.

Those who are aware of the high reputation of Dr. Brinckle as a pomologist, will need no assurance of the ability with which the work will be conducted; and another proof of the zeal and disinterestedness he has long shown in the improvement of fruit culture, is furnished by the fact that he assumes this task without any pecuniary reward.

The first number contains figures of the Brandywine

Moyamensing, Petre, and Pennsylvania pears; the Republican Pippin, Eliza Peach, Burlington Apricot, Wendell's Mottled Bigarreau, and Col. Wilder and Cushing Raspberries.

Each is to appear quarterly, at two dollars per number, four numbers making a volume of forty plates; a price quite as low, probably, as can be afforded. We most unhesitatingly recommend it to the patronage of all cultivators of fine fruit.

Rotting of the Cherry.

Last year the earlier cherries decayed from wet weather, and a large portion of the later varieties escaped. This order was reversed the present season, the most frequent rains occurring at a later period. According to limited observations, trees which stand rather thinly on the ground, on rather elevated or exposed situations, where the air can circulate freely, more frequently escape. An eminent cultivator, in a late letter makes the following remarks:—"If we are to have any more such wet seasons as this, and I presume we shall, then several of the light-colored cherries ought to be set down a peg lower. For instance: Not one-tenth of the Yellow Spanish, or of the Large White Bigarreau, ever ripen, because they rot in wet weather. I have seen the latter however, when it was one of the very largest as well as the best kinds. Now, there are sorts that either do not rot, or only very little; and it is certainly worth while to select such."

Inquiries and Answers.

HEDGES.—"What is the best hedge plant? Is there a perfect hedge of the Osage Orange in any of the Eastern States. Can a hedge be made cheaper than a rail fence?" *T., Jackson county, Iowa.*

The two best hedge plants are the Buckthorn and Osage Orange. The former is perfectly hardy, grows very freely from seeds, and if transplanted with ordinary care there will not be one failure in a hundred plants. But, there are two requisites that are indispensable. It must not be sheared flat on the top, but wedge-form or tapering to a sharp ridge, otherwise it will not be sufficiently dense at bottom. This form must be commenced before the hedge has become half grown. The other requisite is a rich soil, made so if necessary by manuring; and mellow cultivation on both sides, to accelerate its growth.

The Osage Orange is more tender, but will succeed where the peach crop escapes frost. It is more difficult to transplant, but does well with proper care. It makes a most formidable hedge. There are few if any full grown hedges in the more Eastern states, but many experiments are in progress.

Neither of these two plants appear to be liable to any disease or to the attacks of any destructive animal.

The cheapest hedge is one that is well cultivated and well cared for, as it will come into use in a third of the time needed for the neglected hedge. The entire cost from the commencement till fit for use, has usually been found to be about fifty cents per rod. A chief objection to hedges, and which retards their introduction, is the time required for their growth, which usually extends far beyond the patience of our hasty cultivators.

MANETTI STOCKS FOR ROSES.—"What is the chief ad-

vantage which this stock has over others—and would you recommend to procure it at considerable cost?" *R. B.* The chief advantage of the Manetti stock, is that it throws up no suckers. Some roses, commonly used for stocks, as for example the boursalts, increase chiefly by suckers, and hence they are always a greater or less annoyance. But the Manetti, being propagated by cuttings only, is free from this evil. Like nearly every new thing, however, its merits are probably rather magnified beyond reality. All roses, where practicable, should stand on their own roots—many are as easily increased by cuttings as the Manetti, and others may be propagated by layers. To a few, however, neither of these modes apply—and here good stocks become valuable.

CHERRIES.—"In the last number of the Cultivator, you give us a small select list of cherries, for a succession—what other fine kinds would you add? I observe the Downton is not included." *A. L. N.*

The list given in the last number, was intended to comprise such as were both productive and of fine quality; the Downton is not so great a bearer as some of the others, and was therefore omitted. To make a larger list, we might add to those already given, American Heart, Cleveland Bigarreau, Mayduke, Belle de Choisey, Knight's Early Black, Yellow Spanish or Graffion, Napoleon Bigarreau, Downton, Holland Bigarreau, Burr's Seedling, Plumstone Morello.

Cincinnati Horticultural Society.

(1.) For an account of this season's proceedings of this mature and vigorous association, we are indebted to Warder's Horticultural Review. We gather from the account the following interesting facts. One of the most important of its acts is the award of the hundred dollar prize, offered some years ago, for the best strawberry superior to Hovey's celebrated Seedling. This premium was given to *McAvoy's Superior*, formerly known as *McAvoy's No. 12*, and which is thus described:—"Pistillate, very prolific, large, dark-colored, high-flavored and luscious—a hardy plant; the specimens exhibited superior to Hovey's Seedling, or any other strawberry that came under the examination of the committee."

(2.) The committee also notice "*McAvoy's Seedling Pistillate No. 1*; large, prolific, bright scarlet, not high-flavored, but the handsomest dish on exhibition. *McAvoy's Extra Red Seedling*,—pistillate, large, beautiful, very prolific, quality medium, not high flavored. *Schneicke's Hermaphrodite Seedling*,—the committee propose the name of Longworth's Prolific, to be so called because N. Longworth gave the seed; the largest and most prolific hermaphrodite strawberry known to the committee, and *equally prolific with any other variety*; the plant is more hardy than Hovey's, and is recommended for general cultivation after four years trial."

(3.) In connexion with the commendation above bestowed on *McAvoy's Superior*, it must be observed that several collections contained Burr's New Pine, regarded by many cultivators as the best of all strawberries.

(4.) *Longworth's Prolific* did not come in competition for the premium, the offer being confined to pistillates. N. Longworth, who has until the present time, maintained that no staminate or hermaphrodite could be a full bearer in this country, it appears has given up this

point, for he bears the following testimony in favor of this new variety:—"Since it commenced bearing, the new Hermaphrodite has produced a full crop of perfect fruit. This season, on the same border with Hovey's Seedlings, and other varieties of extra large size, it bore the largest crop, and the average size of the fruit was larger than any other. If it shall continue to produce blossoms perfect in both organs, it will be the most valuable strawberry known."

(5.) APPLES.—*Rawle's Janet* and *Newtown Pippin* were presented, "Sound and perfect." "In keeping and eating qualities, these two varieties may be considered rivals; and in productive qualities, the Janet carries the palm, as it seldom fails to produce a good crop." The *Swaar* was exhibited "sound and in good condition; *Jonathan*, sound and handsome." The committee did not speak highly of the *Kingsley* of Rochester, although regarded as a good keeper.

(6.) CHERRIES.—The *Early Purple Guigne* and the *Rockport Bigarreau* are highly commended, the latter as "a magnificent cherry of great beauty."

Horticulture not Forgotten.

The Lenawee county (Mich.) Agricultural and Horticultural Society, have shown by the list of premiums they have offered, a liberality and spirit of encouragement towards the culture of fruit and flowers, worthy of imitation by other county societies, and altogether ahead of even the New-York State Soc. a few years ago.

They offer \$18 in premiums for apples; \$9 for pears; \$9 for peaches; \$9 for cherries; \$9 for plums; \$3 for apricots; \$3 for quinces; \$9 for grapes; \$4 for strawberries; \$4 for gooseberries; \$4 for raspberries, and \$2 for currants; that is, \$83 in all for fruits. For Roses, they propose \$18; for other plants and flowers, \$27. In addition to these, the Society offer \$30 for discretionary premiums on Fruits and Flowers; \$12, besides discretionary premiums, for vegetables; \$12 for the best nurseries; and \$6 for the best gardens; making, in all, for the encouragement of Horticulture, 188 dollars.

They also offer a premium for the best ten ornamental forest trees planted last spring by the roadside; and a premium for the best and greatest number of ornamental trees in or adjoining a road, saved from the destroyer's axe.

If all our county societies should imitate this example, the revolution wrought throughout the country, in rural comfort and prosperity, would in ten years be visible to the most careless observer.

Qualities of new Strawberries.

At the exhibition of fruits during the present season in the Hall of the Massachusetts Horticultural Society, the committee made the following decisions, relative to the quality and character of several new varieties of the strawberry:—

Ohio Mammoth, good, but not of first quality.
Scarlet Melting, of medium quality.
Burr's Seedling, do.
Columbus, do.
Scioto, very acid.
Late Prolific, acid.

Burr's New Pine, high flavored, very fine, of first-rate excellence.

Crimson Cone, acid, lacks flavor.

Charlotte, medium quality not much flavor.

Black Prince, below a medium quality.

Rival Hudson, high flavored, but very acid, of medium quality.

Unique Scarlet, of medium quality.

Montevideo Pine, fair.

Cornucopia, good, rather acid, well flavored.

Primate, indifferent.

Boston Pine, good.

Richardson's Late, very good.

Willey's Seedling, acid, indifferent.

Fay's Seedling, indifferent.

Early Virginia, good.

Aberdeen Beehive, very acid and indifferent.

Walker's Seedling, dark colored, good size, abundant bearer, of high flavor, very fine quality—staminate—worthy, the Committee think, of an extended cultivation.

Hardy Pears.

JAMES MATHEWS, of Coshocton, Ohio, writes, "My fruits were all killed here this spring by late frosts, except a few *Dix* and *Louise Bonne de Jersey* pears, which seem to be hardier than any other pears I have. But for this disaster, I should have had about one hundred varieties of pears alone, in bearing, in my garden, principally new kinds."

Remedy for Plant Lice.

[The following was received too late to test its efficacy this season, all aphides in this region having disappeared. Of the remedies, yet tried, whale-oil soap has been found most effective, and common strong soap-suds nearly its equal, and both greatly superior to tobacco water, unless the latter is made very strong, or stronger than a common decoction in hot-water.]

If you have any species of the aphids in your nursery, please make a trial of the following decoction:—Get from a druggist $\frac{1}{4}$ lb. of Quassia, boil it 15 minutes in six quarts of water; pour off the decoction into a dish pan with handles. When cool get an assistant to hold the pan while you carefully bend down and immerse the branches—giving them a little motion to wet all the insects. Look at your trees two days after; and if the aphides are dead, and the tender shoots uninjured, use and recommend the quassia and let the whale-oil soap perform some other office.

For young and tender buds or grafts, I use the spray from a nearly spent syringe where it is not safe to bend them over the pan. Most resp't. yours, E. G. MYGATT, M. D. *Richmond, McHenry county, Ill., July 23, 1851.*

PROTECTION AGAINST THE CURCULIO.—It has frequently been remarked that fowls were more or less a protection against the curculio. A striking example of this has been shown the present season in the grounds of Wm. H. SOUTHWICK, New-Baltimore, N. Y. He has many very handsome plum trees, of good size, healthy, and vigorous. Several of these trees of different kinds, are enclosed in yards where fowls are kept—separate enclosures being necessary for the different breeds which are here bred. The trees in the fowl-yards are loaded with plums, while on the trees not so enclosed, almost all the fruit has been lost by the sting of the curculio.



STEWART'S PATENT STUMP-PULLER.

The Farmer's Note-Book.

Stewart's Patent Stump-puller.

The above is a representation of a machine which has been successfully used in several parts of this state and in the New-England states, for extracting stumps. The cost varies according to the size and power of the different articles—they being designed to possess a "purchase" of 250 to 1000 tons, and are sold at \$50 to \$200 each—the size in most common use costing the former sum. The operation of the machine is very simple, and may be readily understood from the cut, by persons who have only a moderate share of mechanical knowledge. A single horse is generally used for working the machine, and this force is sufficient for most stumps, but some of extraordinary size may require an additional horse, or instead of horses, a yoke of oxen. The average length of time required for pulling each stump, is said to be about five minutes. For further particulars, inquire of Wm. W. WILLIS, the proprietor of the patent, Orange, Mass.

Suggestions.—Information Wanted.

EDS. CULTIVATOR—The usefulness of your paper, which no farmer who has read it for one year can deny, consists in a great measure in the facilities which it affords for the interchange of knowledge on subjects pertaining to agriculture. It is a field in which conflicting opinions can meet and receive judgment, and each volume is stored with a rich fund of experience, which is really invaluable to the young and inquiring farmer.

But it should not be forgotten that a large proportion of the supporters of the Cultivator, those with whom it is the most important to get the "worth of their money," are working farmers,—not proprietors merely, but men who cultivate their own land, milk their own cows, chop their own wood—men, in short, who do not rely upon the labor of others for their support. This class value an agricultural paper less for its theoretical speculations, or its fancy designs for houses and grounds, than for the published experience of practical and laboring men like themselves—the minute detail of experiments and farm management; the description of farm implements, and in short, everything which can interest a man who performs his work with his own hands, and who is, there-

fore, grateful for any suggestions which will lessen his toil, or increase its reward.

The Cultivator is not deficient in such information, but considering the extent of its circulation, and the number of its correspondents, it might have much more.

There are many points connected with agriculture, upon which I have never seen published essays, and the discussion of which, by competent persons, would be interesting and instructive to many of your readers. For instance, I have rarely seen anything in The Cultivator throwing light upon the subject of clearing and managing new lands, though its circulation extends throughout the western states, where thousands are now toiling in the midst of all the difficulties and privations of a pioneer life. There are many now in your state, known as "early settlers," who in their youth encountered and overcame all these obstacles, and who might now devote a little of that leisure which their successful labor has secured to them, in communicating knowledge,—much of which was gained, no doubt, by many a sad experience—and thus render the same road less rugged to others. Such information, to be really useful and acceptable to the class for which it is written, should embrace the minutest details.

The difficulties and privations which surround the pioneer, especially when he is wanting in capital, and his position is isolated, are far from trifling. The most accurate calculation, and the closest economy of his means, are necessary; and the back-woodsman will often display a degree of calculating management, and an intellectual energy, far superior, as I think, to the most cunning efforts of statesmanship, which the world is accustomed to admire so much, for his object is a nobler and more stimulating one; it involves the welfare of a family which depend upon his toil, physical and mental, for its existence.

Permit me to suggest one other subject, out of several that occur to me, an essay upon which would be very useful and interesting to the inexperienced farmer, but more especially to the green back-woods man.

To the working farmer, who constructs and repairs his own implements, puts up his own buildings, and whose ingenuity in these little matters is often severely taxed, an essay, by a competent person, upon timber and its uses, would be of great assistance. It should particularize the uses for which each kind of timber is best adapt-

ed. Our forests furnish an abundance of material, but in the selection for any particular purpose, a nice discrimination is often important. Timber that may be the best for one purpose, is perhaps worthless for another; white-oak will make a good plow beam, but for an axle-helve another kind of timber is necessary. Some wood is harder, some tougher, some more elastic than others; and information from a competent source upon these points, embracing the different properties, qualities, and uses of timber, would be very interesting and valuable to all those who have not had time to arrive at such knowledge by the tedious and crooked road of experience, and who are compelled to rely upon mere conjecture or hearsay.

Do not suppose that these remarks are intended as a criticism on the manner in which *The Cultivator* is conducted. I, for one, have derived from it too much profit and instruction to find fault with it. But though I regard the publication as most useful and valuable, I would be glad to see it become even more so, by enriching its pages with as great a share of information designed to assist and lighten the toil of the laborer, as that which is intended to increase the profits of the rich proprietor. W. H. C. *St. Clair, Mich.*

P. S. MOSS ON GRASS-LAND.—I would like to get through *The Cultivator*, some information with regard to the cause of the growth of moss on new ground, and the best mode of getting rid of it, if there is any short of plowing. I have ten acres of sloping river bank, intended for pasture, of very uneven surface, with a thin grove of forest trees upon it, on which moss is springing up in extensive patches. Plowing would be impracticable, and even harrowing would be a difficult and necessarily imperfect operation upon such a surface. Is the shade of trees the cause, or will the grass eventually come in if it is let alone? Perhaps an answer to this, from some "one who knows," may instruct others as well as myself.

Drag-Roller.

EDS. CULTIVATOR—Believing that stable manure may be increased in value five-fold over and above its worth as commonly applied, by thoroughly intermixing it with the soil, and knowing that soils by pulverizing, acquire a great increase of power to attract moisture from the atmosphere,—I have been using a DRAG-ROLLER.* It is an implement of which I had read, and about which I had written, but which I never saw until we constructed one this spring. Its operation has been very satisfactory.

Having to cultivate some land for beets and corn which had been left in bad condition, we applied barn-yard manure, plowed it in, harrowed it well, and then applied the drag-roller. The effect was most extraordinary.

* The drag-roller was invented by THOMAS B. GAY, of Virginia. It resembles a roller without rolling, and only drags, grinding the clods to powder. Mine was formed of a hollow log about three feet in diameter; and two pieces of scantling passing through and bolted behind, admitted between them the tongue of the wagon. I think however, that one constructed of plank would be better, as it would strike both large and small clods at the same angle—would require less draft—admit of being heavier, and of course more effectual. It would also be less liable to choke to which ours was subject, if the ground had been recently moistened by rain.

When the clods had disappeared, the ground was plowed again, and the harrow drew up more clods to the surface, which were crushed in succession by the drag. The condition of one piece, containing about half an acre was most unpromising, being almost an entire mass of clods, yet in less than a day it was reduced to a fine tilth. The manure was so completely incorporated that but few persons would suspect that a heavy coat had been applied.

When my hired man came from the corn-field, where he had commenced hoeing, I inquired in regard to his progress. "I never hoed such mellow ground before," was his answer. We think the roots of the corn and beets, which can now pass in any direction freely and unobstructed, will present a fair account next fall. D. T. *Greatfield, 7 mo. 8, 1851.*

Hereford Cattle.

EDS. CULTIVATOR—I did not intend to have said anything more in favor of the Hereford cattle, as I had made up my mind to let them take their chance until their real value should be proved. But as certain individuals are continually boasting of particular tribes of Short-horns, I am anxious to see the Herefords brought into fair competition with them. I think the New-York State Agricultural Society ought to do something to bring the different breeds to a fair trial. I am ready to "stand a brush" with any breed, and in any way the society shall point out. All I ask is "a fair field and no favor." My idea is that some of each breed should be placed in the hands of an honest, disinterested person, to try the experiment, and that the Society should pay the expenses. An accurate account should be kept of the weight and kind of food consumed; the beef, butter, or other products should also be weighed and disposed of, and the cattle which yield the greatest return for the cost of food, shall be deemed best.

I hope the Executive Committee will take this matter into consideration, and propose an honest trial. Wm. H. SOTHAM. *Black-Rock, N. Y.*

P. S. I send you the following extract from a letter I have lately received from a gentleman who has had some experience with Herefords. W. H. S.

Dear Sir—Having for a number of years taken a deep interest in Hereford cattle, and knowing that the country is mainly indebted to you for their importation, and knowing that you have had to stand up almost alone in their defence against the Short-horns, I take the liberty to write you in relation to them.

I am owner of a few Herefords which were descended from those you sold Mr. Luther Bingham. They have worked themselves into general favor among the Green Mountains. It is acknowledged that they are the cattle for this climate and section. A car load of two-year-old steers, (half-bloods) was sent to Brighton last winter, and though they had only been fed in the ordinary way, they brought \$40 per head. They astonished the Boston butchers.

We hope you will not withdraw from the field, but will continue to plead the cause of the Herefords. The world will one day award the praise your efforts merit. Yours truly, JOHN GREGORY. *Northfield, Vt.*

Cultivation by Steam.

The subject of tilling the land by steam, has been earnestly talked of for several years, and some attempts to carry out the idea have been made in England. These attempts have generally been directed to the operation of plowing, either by a locomotive or a stationary engine. Various impediments have thus far prevented the proper performance of the work by either of these modes. Recently, the substitution of the *spade* for the plow, has been suggested, and a machine designed for *digging* the soil has been exhibited at the Crystal Palace. We have seen no account of the machine having been tried, and know nothing of its principle of action, except that the motion is described as *circular*—the spades being set in a wheel.

The discussion of the question of the use of steam for the purpose above mentioned, has brought out some valuable ideas, some of which may at least afford a clew that may ultimately lead to more or less success. We have been much interested in an able article on this subject, published in the *Agricultural Gazette*, from which we make the following extracts. In relation to the question whether the plow or the spade shall be the implement adopted, the writer says:

It is not plowing, neither is it digging that we want. These are only *means*. What we want is the *end*: we care not for the process. Give us a *seed-bed*: show us the soil *comminuted, aerated, and inverted* six or eight inches deep, and we will not ask you *how it came so*.

But if it is not plowing, and it is not digging, what is it? "Go to the mole, though dullard," (the old proverb might be travestied,) consider her *ways* and be wise—who, without any coulter, share or mould-board, without spade, hoe or pick-axe, leaves behind her in her rapid track, a finer mould than ever spade or rake produced, or the most careful-handed gardener ever used to pot his plants with. The very rabbit that scratches his hole in the ground, or the fox that scratches after him, or the dog that scratches after both—the whole tribe of 'claw-foot,' in fact—had scratched hard earth into soft mould, before ever the plow or the spade, or even the more ancient hoe, had broken ground on this planet.

Let us begin from the beginning: let us take cultivation itself into thought for a serious moment, and analyze it into its simplest elements, dropping all conventionalities of plodding custom. What is it? How would you do it, if you had neither plow, nor spade, nor hoe, nor rake, to help you? Surely with the same tool that the Monks of La Trappe used, to dig their graves, and in like manner? If the mole, the rabbit, the fox, the dog, are not sufficient indications, take the hand of man, glove it with hardened steel, multiply it a dozen or twenty times, till you have an instrument as broad as Crosskill's clod-crusher, each hand or claw with its separate arm, forming the radius from a central shaft, which bristles all around with a forest of such arms, a sort of revolving Briareus, *not rolling*—let that be especially remembered—but steam-driven, a thousand *dog-power* if you please, for we must not even mention horses, or we shall drop back into the old Scylla and Charybdis of 'traction' and of 'rolling', two ideas to be eschewed like poison.

Let us suppose the picture of this formidable looking cylinder and claws to be sufficiently described, for the moment reminding one at a distant view, of a half-breed between a hay-tedding machine and a Crosskill's clod-crusher—but unlike them, fundamentally distinct from any and every instrument that was ever seen a-field, as doing its work not by traction, not by its rolling weight, but *driven* by its axis, as the steam-paddle, the circular saw, the driving-wheel of the locomotive, are

driven, supported by its own apparatus, and abrading the soil with its armed teeth, first cutting its own trench, burying itself to the required depth, and then commencing its onward task, *tearing down the bank*, (so to speak,) on the advancing side, canting back the abraded soil, earths' *saw-dust*, 'comminuted, aereated, *inverted*,' into the trench it leaves behind.

Salt as Food for Plants.

Professor WAY, chemist to the Royal Agricultural Society, in a lecture on this subject, stated, as a conclusion to which his investigations had led him, that common salt was neither directly nor indirectly, a constituent of the food of plants. He stated, however, as his belief that salt did, in some instances, produce an action beneficial to vegetation, on some soils. He had not carried out his investigations to such an extent as to say, positively, to what this effect is attributable, but he was "led to believe that the common salt acted on certain silicates of lime present, in a way as yet not understood; and at the same time as it afforded a supply of lime to plants, gave rise, probably, to a modification of silica, important to the straw of the cereals."

In reference to Prof. WAY's remarks, other members of the society gave the results of their experience in the application of salt to land. Col. Challoner said he did not consider it acted simply as a manure on grain crops, "but it stiffened and brightened the straw, and caused it to ripen from 3 to 5 days earlier than it would otherwise have done." Mr. Barrow has found salt improve the strength and quality of his wheat straw, his neighbors' crops having been laid while his stood well. Mr. Mechi said—"without being able to give the scientific reason, salt gave strength and brightness to the wheat straw and prevented its lodging." He applied it at the rate of 3 cwt. per acre, mixed with the same weight of guano."

Virginia Lands.

EDS. CULTIVATOR—I have received vast numbers of letters from every section of the country, from Maine to Illinois, making inquiries as to prices of lands in Eastern Virginia, quantity of crops, state of society, schools, and health of the country. I will state that any quantity of land can be bought within from 15 to 30 miles of the principal cities in the state, at from \$3 to \$10 per acre, according to improvements. Small farms of 100 acres or thereabouts, except in the immediate neighborhood of cities, cannot be bought for less than \$20 to \$100 per acre. As a general thing, the plantations range from 250 to 2000 acres, or more. Many want a small farm in the neighborhood of a pleasant country village. Such things are not often found. Our county seats often have no other buildings than the county offices and a hotel. For health, the country from about the head of tide water, to the Blue Ridge, is unsurpassed; it is generally well watered, with never failing springs of the purest water. Tobacco is the principal crop, to which all else must give way. The wheat crop will, perhaps, on the whole, fall short of 10 bushels per acre, although 20 or 25 are not uncommon, depending on the culture. The application of 150 or 200 pounds of guano per acre, will, on the poorest land, give 12 to 15 bushels per acre, and with a little extra aid will produce clover, which, when once seeded, is always seeded. Corn is the prin-

cipal grain crop. Oats are largely raised, but this year, owing to an unexampled drouth, will produce little more than half a crop, except where guanoed. Wheat is excellent. Cotton is raised by most planters sufficient for home consumption. But little hay is raised, though there might be any amount. No pains are taken to make manure. The pastures are old fields and woods. Sheep are seldom fed summer or winter; but a few turneps, or the like, would probably not injure them, and they can be raised in any amount. The soil is generally a few inches sand; sub-soil clay. No land retains manure better, or shows a more lasting effect from it. The usual team for plowing is one horse or mule, the plow going to the depth of about three inches. The lands may be one-third in natural growth—oak, hickory, pine, poplar, &c.; one-third in cultivation; balance turned out and grown up, in many instances, with a heavy growth of pine—the second growth is invariably pine—many trees two feet through. Many farmers, however, are improving their lands by aid of lime, guano, deep plowing, clovering, &c.

For fruits, we have every variety—apples, peaches, plums, quinces, cherries of every variety, grapes, figs, &c. Of the smaller fruits, we have whortleberries, the bushes of some of which grow 15 feet high, black berries nearly as high. Strawberries and cherries ripen in May; apples, from June to March; peaches, July to September; melons at the same time. For apples, the Albemarle Pippin is unsurpassed. You have no pippin at the north like it. It keeps late in spring.* Schools are scarce; churches generally convenient—Methodists, Baptists, and Presbyterians.

Many inquire whether it is not considered disreputable for a white man to labor. It is almost too foolish a question to answer; but I will say it is not, nor for a woman to labor. I know many places where the timber would more than pay for the land, and I will say, I know of no lands on which a flock of sheep would not more than pay double interest. Ewes drop their lambs early in January or December, consequently are early in market, and can be sent by steamers to New-York or Philadelphia, in 36 hours.

I would recommend, as a general thing, no individual farmers to purchase singly, but to buy several plantations, and settle 40 or 50 families in the neighborhood. If any one chooses to write me at Proctor's Creek, Chesterfield county, I will answer, if I can find time. S. CLARKE, Jr.

P. S. I would say that I have received several communications, saying that land warrants,—purporting to be issued from the land office in Richmond, authorizing the surveyors of different counties to locate such warrants on any unappropriated lands belonging to the state,—are offered by agents at one dollar per acre. It is not a swindle, exactly, but if any one wants such warrants, I will furnish such for \$20 per 100 acres. The state owns large quantities of lands in Western Virginia, and it is very possible valuable locations may be found. Editors generally, might confer a favor by cautioning the public against paying any large amount for such warrants.

* We received some specimens of this apple a few years since, and thought it remarkably fine. Eds.

American Plows in the Great Exhibition.

EXHIBITION BUILDINGS, }
Hyde Park, July 21st, 1851. }

EDS. CULTIVATOR—After a vast deal of trouble, we have succeeded in having the foreign plows tried. On Saturday last we had the trial at Hounslow, about ten miles from the town. This was once the celebrated Hounslow Heath, where robberies were so common that no man dare pass over it without guard and arms—and with these he often was despoiled of his money, and frequently forfeited his life also. Now it is occupied by farmers, gardeners, and village residents, and is a place of attraction. To this place, from the town, it is one continuous succession of market gardens, and although the soil is naturally light, yet, by superior manuring, and cultivation, it produces a great number of crops in the season, and pays rents from \$40 to \$100 per acre, I am told.

The ground selected for the trial of plows was on a clover ley, only one year old, and as it was very dry, the soil clay, mixed somewhat with gravel, it was difficult to turn a fair furrow. The depth required was six inches, the width nine inches. We had entered, American, French, Bohemian, Belgian, Austrian, Dutch from Holland, Canadian, and the three English plows which took the prizes here in April last, and Ransom's plow, which we had at our trial in June, 1850. We were to have had them tested by the Dynamometer, which we insisted upon as a part of the trial, but to which the English judges demurred, as they do not pretend to try their plows by any test of draught. A very heavy rain, however, falling just as we had finished trying the plows, we were unable to test them with the Dynamometer, and have agreed to try those to which medals have been awarded, with the English prize plows, on Thursday next. We have a newly invented Dynamometer from France, by which the test is to be made. I am unable to give you a description of it, but will, after trial, endeavor to give you some idea of it. An English Dynamometer, working in oil, was upon the ground, which is a new one, and I think will work well.

We commenced the trial of plows under all the disadvantages of taking them out of the exhibition without the opportunity of scouring off the paint, with an English plowman most of the time, who had never held an American plow, and with all the prejudice on the part of most persons present, that you can imagine. When we brought up the first plow of ours for trial, Starbuck's No. 6, I heard from a number of Englishmen around—"that plow can't do it, it will break," and expressions like that,—but when the horses started, and the plow went through, and on its return, when the English plowman said *it held easy*, and the horses showed that their work was light, the tide suddenly ebbed. We were not able to adjust Starbuck's plow to turn nine inches wide—ten inches was the least we could do with it. We tried Pronty's No. 40, next, and that we adjusted perfectly to the rules, and when we had finished with that, the matter was settled that American plows could do the work. While we were trying them, an English gentleman living adjoining the land we were plowing, who had seen me as soon as I arrived on the ground, asked the privilege of trying our plows *with one horse*, and took one of the plows to try it. I had one of Starbuck's No. 2,

plows, with a coulter on the share, and he took that to another part of the field, and with one of his big horses, plowed with perfect ease, *six inches deep and nine inches wide*, without any extra effort of his horse. He gathered around him, as you may well imagine, a large crowd, and the wonder expressed was very amusing. The result of this was, that the gentleman ordered *this plow* on the spot, and before I left, gave the names of four others in the neighborhood, who were present, for the plows to be ordered for them. This gentleman said, after he had tried the plow, "I do not mind what the judges may say about the plow, it is *the one for me*." Had I with me fifty of Starbuck's plows, of medium sizes, I could have sold them to farmers before this.

We had four American plows tried—Starbuck's No. 6, Prouty's No. 40, A. B. Allen & Co.'s No. 20, and a Philadelphia cast-steel plow. The judges decided that they would award only one medal to each foreign nation. I endeavored to procure two, but as some of the nations had only one plow, and as the general rule had been adopted in some other cases, they would not change it. The medal was awarded unanimously, to Prouty's No. 40. Starbuck's No. 6, did equally good work, except that the furrow-slice was too wide. Taking into consideration all the embarrassments under which we labored, we are satisfied with the result. We have proved that what the London Times has said of our plows is utterly untrue—"that they are behind the age." I have an order from an English plow-maker, for one of Starbuck's plows for his own farm! and I have no doubt when he receives it, it will be multiplied for the benefit of others. He desired to take the one we had tried to-day, but as that was disposed of, he must wait, with others, until they can be forwarded.

We had at the trial to-day, some first-rate farmers from the *Tweed*, who are friends of Mr. Thomas Bell, and who were with him; and who expressed themselves greatly pleased with our implements. One of them, by-the-by, was present at the speech of Prof. J. before the *Berwick Club*—of which we had the account sent us. He says, that the report of the speech, so far as it went, in regard to our country *was true*, but that much more that was disparaging to us, was said—and that although he had never himself been in the country, he was satisfied that it was entirely over-drawn, and designed for a free-trade market here, and he so expressed himself to his friends on the spot. I have found, in traveling through Northumberland and Cumberland, among the farmers everywhere, attention to this speech and the "Notes," and I have taken the liberty to say, on every occasion, that Prof. J. could have written a *much better book*, if he had *known more about our country*. I directed their attention to a sample of wheat on exhibition at the Crystal Palace, from a portion of the wheat district which he said was being laid down to grass, because it was exhausted,—the whole field from which it was taken yielding 63½ bushels to the acre! This was a sample of Mr. Hotchkiss' wheat, from Lewiston, Niagara county, which received the first premium last winter at our annual meeting. I sent with the samples, the proofs which were presented to our judges—and there is not in the exhibition, anything that compares with it as to the amount raised per acre, and I have reason to believe

that the judges who have passed upon it, will thus notice it in their report. I have also referred gentlemen, when they have mentioned this to me, to a single fact, which would show them at once, how fallacious these statements were—the quantity of wheat and flour exported to this country, (England,) during the last six months, taken from a Liverpool paper, being nearly double that of the year when Prof. J. was in our country.

I have made a very pleasant tour with Prof. J. in Durham, Northumberland, and Cumberland counties, where I visited a number of tenant farmers of the very best kind, who are making money, notwithstanding the depression of the times and high rents. I intend, whenever I may have time, to write out what I have seen and learned, and I think I can show our farmers how English farmers are enabled to live, with the great rents they are, in most parts of the country, still obliged to pay, notwithstanding the deductions that are made. The three great principles that a good farmer here relies upon, are these: 1st. *Thorough draining*; 2d. *High manuring*, with guano or other prepared manures, in addition to barn-yard manure, if required; 3d. *Thorough cleaning* of the crop, so that the grain or other crop shall have *all the nutriment* to perfect it, instead of leaving the greater share, (as is too often the case with us,) to support the weeds.

I became acquainted at our trial of plows, with Count de Gourcy, a distinguished French Gentleman, who is one of the most intelligent agriculturists that I ever met with. He has written several works on the subject of agriculture—his *Travels in Scotland and England*, you will find in our Library. He was formerly a practical farmer himself, on a farm of 500 acres, on which he introduced the best system of husbandry from England and Belgium, and he was subsequently connected for a considerable time, with the army of France. He has, for a number of years, devoted himself in the summer season, to visiting the different countries in Europe, passing months in the farming districts, examining minutely and carefully into the systems and practice which prevail, and taking notes of their stock, dairies, &c., and in winter, he copies his notes, and publishes them for the benefit of the farmers of France.

He spoke in very high terms of our plows. He had seen three of them in operation in France, which had been sent over by some American gentleman who had purchased Rambouillet sheep; but his name he did not recollect. They were, he said, so light, so simple in their construction, so easily operated by the peasantry of France, and so cheap, that he preferred them altogether to any other plows. He expressed himself highly gratified with the performance of our plows at the trial—said they had accomplished all that was desired.

He mentioned to me a very remarkable circumstance in the breeding of cattle, which seems, at least as far as tried, to have been successful. This was, the method by which a breeder can secure bull or heifer calves as he may desire. He said, if the cow is milked clean when she receives the bull, the produce will be a bull calf—if she receives the bull with a full udder, the produce will be a heifer calf. A farmer in France, whom he named, put seven cows, with their udders thoroughly deprived of milk, and the produce was five bull calves—two hav-

failed to produce any. I understood several other instances within his own observation, had uniformly resulted in the same manner. This is important, and certainly worthy of a trial. Whether anything of the kind has ever been observed in our country, I do not know. He says that the work of Guenon is universally credited in France, and that they are so particular with their dairy stock, that they use no male which has not the desired escutcheons. I went through one class of the cows and heifers at Windsor, with two intelligent French gentlemen, who came over by order of the government, I believe, and they did not pass a single animal without carefully examining the developments as suggested by Guenon. I believe the rule holds good, that those cows which are so marked, are uniformly fair milkers, although many excellent milkers do not have these marks. The Frenchmen say, however, that it is all important in the selection of heifers which have not had a calf, as you may, with reasonable certainty, select a fair milker. I find many Englishmen who have paid attention to the subject, and they came to the opinion above expressed.

I omitted in my last letter to say that the first prize Short-horn bull is said to have been sold for 500 guineas, to the Belgian government. Although he was a fine bull, I think the money could have been much better expended on the show grounds. Yours. B. P. JOHNSON.

The Science of Unimproved Farming.

ANALYTICAL LABORATORY, YALE COLLEGE, }
New-Haven, Conn., July 29, 1851. }

MESSRS. EDITORS—It seems to me that we need a little change in our modes of arguing upon agricultural subjects. We have been accustomed to argue upon the necessity of improvement—have been endeavoring to convince the mass of farmers that they may better their practice in a variety of ways, and have given them what we consider incontrovertible proofs upon the subject, yet all, in many cases, without avail. They say that scientific farming is nothing more or less than an imposition upon the more gullible part of community; that scientific men know nothing of practical subjects, and that the poorest of all ways to make boys farmers, is to set them at studying the subject of their future profession in any other manner than following the plow, or swinging the scythe.

Let us then take up this view of the subject, and see what can be made out of it. The science of improved farming has met with its advocates, and numbers many followers; why should not the purely practical and let-alone system, have something publicly said in its favor? If it is really the true system, it ought to bear the test of printing as well as any other, unless it be that the very act of printing destroys all truth. The fact is, that the farmers want information, and are determined to have it from some quarter. If, as many of them say, the present book farming is all wrong, let us have something that is satisfactory.

One of the first points, and a highly cardinal one in the estimation of many excellent practical men, is that a young farmer, or a boy preparing to become a farmer, must carefully avoid anything like an extended course of study. Such a course is all very well for those who

are to be professional men—they need it, and are benefited by it. By such study they learn what has been done in their profession by others, they learn what remains to be done, and what is doing; they are thus enabled to commence their active life with clear ideas of what is before them, and with a full knowledge of that which is essential to their ultimate success. Nothing of this sort is necessary to the young farmer. If he is allowed to study anything relative to his profession, it will be the ruin of him as a practical man. A tolerable education in the district schools or academies, embracing the common English branches, is all that he can safely bear; anything farther than this will make him an improving farmer, which is closely connected with his becoming somewhat scientific. The unimproved farmer meditates deeply upon the curious fact, that in proportion as men are educated, so are they more likely to be filled with what he calls wrong notions, to commence trying experiments, and to advocate the reading of books.

Some persons might draw from this fact, conclusions favorable to the effect of knowledge upon the agricultural mind, especially as the results obtained by these reading farmers are frequently of the most satisfactory kind; not so, however, with our friend; he decides that the only way to prevent his boys from imbibing any of these ruinous modern fancies, is to confine them at home, to take them out of school at an early age, and to keep them hard at work on his farm. Thus they learn what work really is; they become used to it in every department, and by the time they are twenty, are able, perhaps, to lead off the hired men with the scythe, hoe, or cradle, to guide the plow or wield the axe, with any others in the country. This now, he says, is an education worth having; here is a boy who is able to take care of himself under any circumstances; he knows all of farming that is needful to be known, as much as his father or grandfather knew before him, and will pursue the good old track quietly, frowning down all innovations, for the very reason that they are novelties.

The farm, under his management, will run down gradually it is true, but that it has been doing steadily for the last twenty years; land is not as good as it used to be; but if it gives out entirely there is plenty more at the west, so that that difficulty can be overcome without any help from books. He is in fact a specimen of a farmer whose only literary education has been of a nature wholly unconnected with his business in life, whose practical education has been just that of the hired day laborers whose work he directs; he has had no advantages apart from those afforded by intercourse with his neighbors, whose experience is just that of his own father over again. These then, must be considered the fair results of a purely practical education. Are the farmers of our country content to be represented as such a class?

Whether content or not, this must be the most appropriate description of them, unless they depart from the strict line of their practical course. A young man cannot go into other districts to study farming under the best farmers without getting indirectly at least, the results of greater knowledge and science. This is a lamentable state of things, but it nevertheless exists. The

men who in all parts of the country stand pre-eminent for their good crops, for their fine stock, and for their admirable management, are precisely the men who are most ready to acknowledge their obligations to science, and who have the most frequent recourse to books for assistance and advice in every operation. This is a most unfortunate obstacle, but nevertheless one that actually exists; it is unfortunate because it ties the unimproved, entirely practical farmer, down to a narrow field. By condemning study he condemns all the results of study, unless he means to adopt the results of others' researches in an underhanded way; he cannot, of course, do this consistently, for if he once acknowledges that any one by study can make improvements in farming, it follows that he himself might also do something in the same way, and so this whole system of purely practical education falls to the ground. The unimproved system, then, not only shuts out books and study, but the results which others derive from them; this is obviously the only consistent course. If carried out entirely and fully, the advocates of the letting alone system would have occasion to rejoice in the sudden suspension of all progress that would ensue. They would be forever freed from all the urgent solicitors who beg that they will subsoil, drain, and clear their land, who desperately force upon them their prescriptions for concentrated and special manures, and who back their recommendations with facts and figures that are occasionally of a most stubborn character. The young farmers would be left to grow up in utter ignorance of the word improvement, and would scarcely possess more ideas than the team that they drive, as to the practicability of making any useful change in the old customs to which they had been trained.

Without books, without study, without lectures, the knowledge of any little advance which might occur here and there, would be as slowly diffused as it formerly was among the aboriginal inhabitants, and centuries hence would see our agriculture scarcely any better than now. This is no exaggeration; if we could blot out all of the works on agriculture, all of the periodicals, and stop all lectures on the scientific bearings of this subject, advance would be checked at once and forever, or at least for as long a time as such system should prevail.

While those who engage in other pursuits would be constantly improving, constantly discovering new means of successful and economical application of their labor, the farmers would remain at a stand, and would serve as an abiding representation of long passed ages.

Such is the fairest statement that I can make for the unimproved farmer; such I consider the legitimate carrying out of his principles; it is under such principles that we constantly hear book-farming decried, that we hear science spoken of sneeringly and contemptuously, that every proposition involving a change is looked upon, not as deserving investigation, but as a legitimate and natural object of suspicion. It is under the influence of such principles that so much of the fairest and most fertile portion of our country has been worn out and exhausted by cultivation, and that so much more is deteriorating still from year to year.

If a proposition for some appropriation to aid in the dissemination of knowledge, or the spread of scientific

principles, among agriculturists, is brought forward in any of our legislatures, or other public bodies, it is, as a general rule, rejected or passed over, and often with contempt. Who, now, are the men that thus retard all progress and hang as a dead weight upon every effort? They are not lawyers, physicians or merchants; these are generally men of more enlarged views, who readily see the true bearings of such movements; they are in almost every case the *unimproved* farmers. These are the men who have remained asleep while the rest of the world has been moving on, who have been selected by agricultural communities to express their will, and who as the exponents of that will crush every forward movement.

If a speaker addresses a popular assemblage, in support of radical changes in the present system of exhausting culture, too generally pursued, it will not be the professional men who will dissent from his views, but the very men who would be benefitted by the change, and improved in their condition. Thus it is everywhere, the obstacles to improvement exist among the farmers themselves, and until they will move far more unitedly than they ever have done, its advance must still be slow.

I have endeavored to show what a system of unimproved farming would be if carried out in its fullest extent, and it may serve to convince all, that books and study of some kind are necessary. Those who feel that the present position of agriculture is not what it should be, must unite in bringing about a change. If the works now existing are not sufficient, if the systems of instruction proposed are not satisfactory, let the objectors exert themselves and produce better, but in the mean time, let all with one voice join to condemn the practice of the unimproved farmer, and to arouse him from his slumbers. Yours truly, JOHN P. NORTON.

Importation of French and German Merino Sheep.

EDS. CULTIVATOR—GEORGE CAMPBELL, Esq., of West-Westminster, Vt., in May last, returned from a tour through France, Germany, and Spain, bringing with him an importation of French Merino and German Merino sheep. William Chamberlain, Esq., of the firm of Chamberlain & Phelps, New-York city, is associated with Mr. Campbell in this enterprise. Receiving a polite invitation from Mr. Campbell to visit him and examine his sheep, and to be present at their shearing, I embraced the same, and received much pleasure from my excursion.

Mr. Campbell found no sheep in Spain which were, in his judgment, worth importing to this country. He says the flocks of sheep which formerly so highly distinguished that country, have melted away and become sadly degenerated by bad management. After a thorough inspection of the best flocks in the three countries, Mr. Campbell purchased about 100 sheep of Messrs. Gilbert and Cughnot, whose flocks are from the celebrated government flock of France, at Rambouillet, about 40 miles from Paris. This flock is descended from the importation of Spanish Merinos made by the French government in the year 1786. In "The American Shepherd," I find the following extract from a report concerning this flock, by M. Gilbert. He says—

"The stock from which the flock of Rambouillet was derived, was composed of individuals beautiful beyond

any that had ever before been brought from Spain: but having been chosen from a great number of flocks, in different parts of the kingdom, they were distinguished by very striking local differences, which formed a medley disagreeable to the eye, but immaterial as it affected their quality; these characteristic differences have been melted into each other, by their successive alliances, and from them have resulted a race which perhaps resemble none of those which compose the primitive stock, but which certainly does not yield in any circumstances to the most beautiful in point of size, form, and strength; or in the fineness, length, softness, strength, and abundance of the fleece."

Again in the same work, I find it stated of the flock that,

"The fibre of the wool is very fine, quite equal to the best Merino in Spain, and is the very antipodes of that of which so much complaint is made by the manufacturer, of being harsh, dry, crispy, and wiry. The fleece opens of a brilliant creamy color within, on a skin of rich pink, and is soft, glossy, wavy and very even over the whole body; is exceedingly close and compact, and has a yolk free from gum, and easily liberated when it comes to be washed, but which protects the wool from the weather, and keeps it free from the dead ends that are so objectionable. It becomes of the purest white when scoured by the manufacturer, and still retains its mellow, oily touch, so grateful to the handling of good judges. Its felting properties are beyond dispute, making it a choice material for the manufacture of fine cloths."

After a close inspection of Mr. Campbell's importation, I am led to think that all I have ever read respecting the French Merinos, is very just. They appear to be possessed of constitutions as hardy and vigorous as those of our best native or coarse wool sheep; they are very square, finely shaped sheep, and by far the largest pure merino's I have ever seen,—indeed I have rarely seen larger sheep of any kind. Generally, they have heavy dewlaps, and large folds of skin on the neck, reaching back on the shoulders, and often nearly over the body, the wool growing thickly over them, and covering the head, and the legs clear down to the hoofs, so that the fleece, when shorn, spreads out into dimensions equal to a covering for two such carcasses. The fleece is very thick and heavy, and fine enough for any body. I cannot but regard these sheep as a most valuable acquisition to our state, and am induced to believe them very valuable, among other things, for crossing with our best mutton sheep, thus refining the fleece of the latter, without deteriorating the carcass.

I will cite a few examples from minutes taken at the shearing, which are a fair average of the entire importation:

	Live weight.	Weight of fleece.
No. 2,.....	85 lbs.,	11 lbs. 8 oz.
5,.....	89	13
10,.....	120	12
17,.....	105	14 12
20,.....	106	15
26,.....	122	13
34,.....	103	15
39,.....	107	14 14
48,.....	97	14
50,.....	92	15
56,.....	74	16
61,.....	109	14

A buck 2½ years old, whose live weight was 224 lbs., sheared 21½ lbs. It is proper to say that the wool was unwashed, and as clean unwashed wool as is ever seen; that the sheep are mostly yearlings, with one year's growth of wool; and that the fleeces had all sustained

quite a loss on shipboard, from the wool being rubbed off and picked out, and eaten by the sheep,—a habit which I am told they are apt to acquire, when confined long at sea.

Mr. Campbell inspected several flocks of fine wool sheep while in Germany, but found them to be mostly Saxony, with very small carcasses, and very short light fleeces. In Silesia, however, he found a flock descended from an importation of Spanish Merinos made in 1811, which have been bred with great care and purity. In size they compare well with the best Paular Merino's in the state of Vermont, but have a thicker, heavier, and finer fleece than our best sheep. For fineness, their wool will compare well with the finest Saxon. They have square, finely shaped bodies, and appear to possess hardiness and vigor of constitution. I again select from my minutes several samples, which will give a fair average of the shearing of the whole.

GERMAN MERINO BUCKS.

	Live weight.	Weight of fleece
No. 18,.....	83 lbs.,	7 lbs. 6 oz.
76,.....	86	7 5
80,.....	99	8 8
13,.....	91	10 8

GERMAN MERINO EWES.

No. 4,.....	61	7 14
10,.....	71	9 13
15,.....	80	9 0
17,.....	75	9 8
19,.....	69	7 15

Both bucks and ewes of this stock are yearlings, with fleeces of 10 months growth, unwashed.

Mr. Campbell intends to exhibit several of his imported sheep, of both breeds, at our State Fair, the 9th and 10th of September next. Any information in regard to these two importations which may be desired, may be obtained by addressing Mr. Campbell, or Chamberlain and Phelps, 103 Front street, New-York city, or William Chamberlain, Esq., Red Hook, Dutchess Co., N Y. F. HOLBROOK. Brattleboro, Vt., Aug. 1, 1851.

Cultivation of Cranberries.

EDS. CULTIVATOR—Please accept a vase of Cranberry plants, of the variety known as the "Upland Bell Cranberry." Wishing to test the plants thoroughly, on the 1st day of June 1851, I removed a bed of these plants from rich upland soil into the poorest kind of loam—both soils being near Lansingburgh, and 100 feet above the Hudson—no swamp, muck, or brook in the vicinity. They were watered but once, which was at the time of setting. The plants were just budding at the time. Wishing to send you a specimen, I have taken them up while in bloom, and I think with but little care they will do well. It would be advisable to water them occasionally, the same as other plants. The new shoots of each year furnish the fruit which are of extra size and flavor. The plants the first year, yield but half the usual crop, after transplanting. I shall be able to send you this fall a vase of the plants in full growth and cultivation, with the fruit attached. Plants can be furnished in the fall, growing in pots with the fruit upon them, and fruit when protected from frost, will remain fresh upon the vines until they again blossom, thus forming a beautiful ornament for the window, garden or greenhouse.

The soil in the vase that I have sent you was taken up with the plants. The vines increase rapidly from runners, seeds and shoots, and will take root and throw up shoots wherever they touch the ground. This plant is easier cultivated than any fruit with which I am acquainted, and is perfectly adapted to almost every soil and location under good management. I also send you specimen plants of an early variety of the low bush cranberry which I took yesterday from a bog about 20 miles north of here. The blows were of a deep scarlet, and I should think the early buds extremely liable to be injured by late spring frosts. They are propagated differently from the bell variety, and the leaves presented the same shrivelled appearance while growing, that they do now after being taken up. The plants stand thick, scarcely any weeds or grass appearing among them, and cover, I should think, about two acres. I was informed by persons in the vicinity that the fruit is not large but of good quality. These vines were the largest specimens that I could find after diligent search. F. B. FANCHER. *Lansingburgh, N. Y.*

Rambouillet Sheep.

The first fine woolled sheep that were allowed to go from Spain, were selected from the best royal flocks of that country, and presented by the King of Spain to the King of France. Since about the year 1787, these several flocks have been mixed and bred together, under the control of the government of France. The Minister of Agriculture is annually elected, and has the control of the flock. He resides in Paris; but the Director resides on the farm at Rambouillet, about forty miles from Paris. He keeps the books, and registers the birth, death, and sale of every animal; which is known by its respective number, which is told by more or less notches cut in the ears, and the rams have an additional number, or figures burned upon the side of the horns. This method of registering, gives the lineage back for more than fifty generations.

These sheep are well sheltered throughout the winter, and at night during the summer. The lambs are allowed to drop in the month of January. These, and no other flocks in France, are allowed to graze unless attended by a shepherd and his dogs. There are no fences in France. The sheep are allowed to feed along side, and close to fields of wheat and other grain. It is wonderful and quite amusing, to see dogs protect the grain, though the flock may be within reach of it.

At Rambouillet, the surplus sheep of the government flock are annually disposed of at public auction, which takes place on Sunday. This year it came off on the 27th of April. There were no ewes sold; but fifty-one superior rams sold at a price averaging about \$210. Fifty of them were fifteen months old, and their average live weight was 186 pounds, as registered upon the books.

These rams are never put up at a less price than 260 francs. If not taken by bidders, they are withdrawn, and afterwards disposed of at private sale. All of the rams were sold to go out of France; nine of them only, were bought by Americans. The balance went to Russia and Australia.

Upon looking over this splendid flock of about 400,

and other superior flocks of Merinos, in different parts of France, it was a wonder to me that none had gone to England, and but a short time since none had found their way to America. Probably one-sixth of all the pure Merinos, of this enormous size and weight of fleece, have been purchased by Americans, and a majority of them within a year. These sheep are not only superior for their great production of wool, but they will eventually supersede the best English breeds for mutton. SOLOMON W. JEWETT. *Weybridge, Vt., July 8, 1851.*

Average Yield of Wheat in New-York.

We wish to correct a mistake contained in an editorial note in *The Journal of Agriculture*. It is laid down as a "fact," that "the average crop of wheat in the state of New-York, at this time, does not exceed 12½ bushels per acre." It is also stated in the same paragraph, that thirty years since this state averaged 30 bushels per acre, and that the state of Ohio at that time averaged 35 bushels per acre, and now produces but 15. We know not on what these statements are based, though we recollect having seen the following in Prof. MAPES' *Working Farmer*: "Such practical farmers have caused the wheat crops of New-York to fall from an average of 30 bushels per acre, to 12½ bushels, and of Ohio, from 35 bushels to 15."

The statistical returns of 1845, gave an average yield of the wheat crop for New-York, of 14 bushels per acre. This is the lowest average for which we have any data. It will be remembered that it was taken at a time when this crop, in a large portion of the state, was nearly destroyed by the "weevil," or wheat-midge. It was the injury done by this insect, and not the exhaustion of the phosphate of lime from the soil, (as stated in the note above mentioned,) which produced the deficiency.

We are inclined to think that a very general error has prevailed on this point. That many farmers have practiced an exhausting course of cropping is unquestionably true; but so far as regards the failure of the wheat crop in this state, we are confident that the chief cause has been the injury done by the insect referred to. We have numerous statements from farmers to this effect; that their wheat grew as well, and appeared as promising as ever, and that the only drawback to the yield was the shrinkage of the grain from the attack of the insect. This is supported also by the fact, that as the midge has decreased in numbers—which it has done greatly in the eastern part of the state, within the last few years—the crop has increased—the yield of the last two seasons having been equal to any ever realised here.

But what reason is there to believe that the average yield of this state ever amounted to 30 bushels per acre, or that of Ohio to 35 bushels? This statement seems altogether unsupported by evidence. As regards Western New-York, we have the testimony of the best wheat-growers, that the crop of that section has been heavier on the average, for the last six years, than it ever was previously. [See current vol. *Cultivator*, pp. 166, 167.]

Fashion makes foolish parents, invalids of children, and servants of all.

Trust him little who praises all, him least who is indifferent about all

ANSWERS TO INQUIRIES.

YARD FOR FOWLS.—L. M. R., East-Plymouth. Common laths would probably be as cheap and convenient an article for this purpose as you could use. Set up stakes or posts, eight feet apart; nail on these, two strips of two inch plank, three inches wide—one strip a foot and the other four feet from the ground. Nail the laths on these, vertically, two inches apart. You can cover the top in a similar way.

APPLES FALLING FROM TREES.—L. M. R. Apples fall from trees from various causes. It is usual for many more to *set*, than can be brought to perfection; nature, therefore, provides that the tree shall be relieved of its superfluous burden. Still it is not uncommon that more remain than can reach a full size, and become properly ripened. Fruit also drops prematurely from the attacks of insects. Apples are injured by the "Apple-worm," which is derived from an egg deposited by a moth. It eats into the apple, which causes it to perish. It is advisable that the apples which drop off, should be immediately disposed of in such a way as to destroy the worm which is generally in the apple at the time it falls. This may be done by feeding them to swine, or allowing swine to run in the orchard.

COMPOSITION FOR ROOFS.—D. D. D., Ilion, N. Y. The article in our June number, contains all the information we can give on this subject. The article says the tar or pitch must be used *hot*, which, of course, implies that it must be heated, but we do not know whether it is necessary to *harden* it by boiling.

SHELTERING MANURE.—Answer to W. C. A., in our July number. Construct a shed, 30 by 15 feet, attached to a stable for 10 cattle, and have the manure thrown evenly over this space, and put upon it six hogs. I will engage that the manure will not get "fire fanged," or heated so as to injure it. He should also put eave troughs to his barn, and occasionally, in the warm season, conduct the water from the roof, on to the manure. If he will do this, I believe he may dispense with any chemical operation. He will find the swine excellent chemists in this matter. *Brooklyn, Ct.*

SEEDING FOR PASTURAGE.—B. H. M., Morris, N. Y. We should sow the timothy or grass seed the first week in September, and the clover the following March, on a light snow. We have known clover sown with rye, in autumn, with good success; but there is risk of its being winter-killed on many soils, and to avoid this risk, it is safer to defer sowing till spring.

MANAGEMENT OF A RECLAIMED SWAMP.—A Subscriber, Simsbury, Mass. If your ground is sufficiently drained, your first object will be to destroy the wild grasses, rushes, &c. If it is in a condition to be plowed, take a plow designed for a bog plow, which you will find at most of the implement stores in Boston, Albany or New-York,—and turn over six or seven inches of the surface as *flat as possible*; then harrow lengthwise of the furrows with a very light harrow, and sow it to red-top and timothy in the early part of September. If the furrows do not lie even, pass a roller over them before harrowing which will press down the edges. If some bull-rushes, or other worthless herbage comes up the next

season, dig them up with a mattock, or some tool with a narrow blade, to break the soil as little as possible. When the cultivated grasses get well set, it will probably be beneficial to irrigate the surface in the spring month—say April and May; but if the water is continued on through the season, it will bring in the wild herbage again.

NEW PUBLICATIONS.

THE BOOK OF THE FARM; detailing the labors of the Farmer, Steward, Plowman, Hedger, Cattle-man, Shepherd, Field-worker, and Dairymaid. By HENRY STEPHENS. To which are added Explanatory Notes, Remarks, etc., by JOHN S. SKINNER. Two vols. 8 vo. New-York: C. M. SAXTON.

The Book of the Farm is a work which needs no encomiums. The author is Mr. STEPHENS, editor of the *Scottish Quarterly Journal of Agriculture*, known as one of the most sound and practical agricultural writers of the day. The edition here offered, was published under the editorship of the late J. S. SKINNER, Esq., who added various notes of comment and explanation. The volumes are presented in a very handsome style both in respect to typography and binding.

THE JOURNAL OF AGRICULTURE.—We have received the first number of a paper with this title, published at Boston, edited by WM. S. KING and J. J. MAPES. Its leading object may be learned from the following extract from the introductory chapter: "So convinced are we that science is at the foundation of all improvement in Agriculture,—that it is the foundation itself,—that we desire and design to give it a *foremost place* in our pages." We shall rejoice at any aid which the farmer may receive from this or other sources. The number before us contains several very able and valuable articles, and from the known ability of the writers, we anticipate the reception of much useful instruction through this medium. It is to be published semi-monthly, at \$2 a year—each number containing 32 pages, octavo.

HARPER'S NEW MONTHLY MAGAZINE.—The number for August is highly entertaining. The leading article is one on the "Childhood and Youth of Bonaparte," by JOHN S. C. ABBOTT, with six handsome illustrations. Among other good articles we notice "Village Life in Germany," "Infirmities of Genius," "Phantoms and Realities," "American Notabilities," by Lady EMELINE STEWART WORTLEY, &c. Published monthly by HARPER & BROTHERS, New-York, at \$3 a year.

THE COTTAGE BEE-KEEPER; or suggestions for the practical management of Amateur, Cottage and Farm Apiaries, on scientific principles. By a COUNTRY CURATE. Published by C. M. SAXTON, New-York.

This is an English work of some reputation and will be found useful to bee-keepers in this country. Mr. SAXTON has "got up" the book very neatly, both as to typography and binding. It contains cuts of hives, and fixtures necessary to an apiary.

Sward which is plowed early in September, will rot so as to become mellow in spring. If plowed late in the fall, it will remain tough, and the grass will grow the next season.

NOTES FOR THE MONTH.

ACKNOWLEDGMENTS.—Communications have come to hand since our last, from Dr. Melvin Barnes, F. B. Fancher, Hon. F. Holbrook, S. Clarke Jr., L. M. R., W. G. Edmundson, M. Butler, W. H. C., G. B. Smith, Wm. R. Sanford, J. W. Proctor, Levi Bartlett, John Johnston, B. P. Johnson, A. Marks.

BOOKS, PAMPHLETS, &c., have been received as follows: "The Illustrated Phrenological Almanac, for 1852," from the publishers, FOWLER & WELLS, New-York—"Book of the Farm," by Henry Stephens, with Notes by J. S. Skinner, 2 vols., from C. M. SUTTON, publisher, New-York—Fresh Gleanings, or a New Sheaf from the old fields of Continental Europe, (new edition,) and Reveries of a Bachelor, or a Book of the Heart, (10th edition,) both by I. K. MARVEL, from the AUTHOR.

MEDITERRANEAN WHEAT.—The more this wheat is known, the better it is liked. Its earliness renders it almost proof against injury from the "weevil" or wheat-midge. It has generally escaped this season, though in some instances other kinds growing in the same field and sown at the same time, were considerably lessened in yield by that insect. This wheat makes good flour and the flour makes good bread. We never tasted better bread, than we ate a few weeks since at the tables of several families in Cayuga and Onondaga counties. We were told it was made from Mediterranean wheat, and that it was preferred to white wheat, if rightly ground, by families in which the proper management of the flour is understood—that the same quantity of it would make more and better bread. The millers know how to grind it better than formerly, and hence it stands better in market—commanding within three to five cents per bushel as much as the best white wheat. It yields well. Messrs. McCULLOCH & KIRTLAND, of the Cantonment Farm, Greenbush, raised this season thirty bushels per acre on a field of nine acres, which eight or ten years ago, was so wet that it would only produce white birches, bushes, rushes and coarse water grasses. It was under-drained, and has since borne good crops of hay, Indian corn, and lastly wheat. The latter crop was sold as seed wheat, for \$1.25 per bushel, to go to Fort Leavenworth, Mo., on an order to EMERY & Co., from the U. States Government.

FATTENING SWINE ON APPLES.—The evidence which has heretofore been published, in regard to the value of apples as food for stock, is supported by facts which are frequently brought to our knowledge. Mr. JAMES M. ELLIS, of Onondaga Hill, lately stated to us that he had been in the practice of using apples extensively for fattening hogs, for several years, and their value had been proved to be such, that he deems it an object of profit to produce pork by the aid of apples, but would not, otherwise, so regard it. He has a large apple-orchard, in which he allows his hogs to range most of the season. They are of much benefit to the trees by destroying many of the insects which the fallen fruit contains, and by keeping the ground loose and rich. As the fruit approaches ripeness, the nutriment increases, and the hogs thrive faster. When nearly ripe, those apples which are not readily marketable, and not suited to long keeping,

are gathered and boiled, or steamed, are mixed with meal and the slops of the kitchen and dairy, constitute the food for fattening hogs. The meal is increased towards the close of the fattening process, being at last equal to one-fourth of the bulk of apples. Mr. E. informs us that his pork is always of excellent quality, and is so regarded by all who have purchased it—being solid, of good texture, and of superior flavor.

DRILLING WHEAT AND OTHER GRAIN.—The use of machines for sowing grain, is becoming more and more extended every year; owing to the manifest advantages which they have over the common mode of hand-sowing. The advantages have been, on different occasions, so fully set forth in this journal, that they need not be now particularly adverted to. Those who have used drills, have generally adopted them for sowing all grains. Their advantages are most manifest for winter wheat, but are very considerable for barley and other spring grain. Col. SHERWOOD, of Auburn, sowed all his grain crops of this year with one of Bickford and Huffman's drills, manufactured at Macedon, Wayne county, N. Y. A cut of this drill was given in our May number. He is confident that there is a great gain in the barley crop, by the use of the drill—particularly in the certain and quick germination of the seed, and the regular and uniform growth and maturity of the crop. His barley was very even, and everywhere alike over a large field. Col. S. thinks the drill makes a considerable saving in seed, besides insuring a better crop.

PAPER MANUFACTORY.—We are glad to be able to say that we have, at last, an establishment for the manufacture of paper in this vicinity. Mr. C. VAN BENTHUYSEN has lately erected and put in operation a mill for this purpose, at the village of Bath, on the opposite side of the river from this place. The building is made in the most thorough manner, and all the machinery and apparatus are of the most approved and improved description. The motive power is steam,—the engine of 100 horse power—and when the establishment is in full operation, it is capable of turning off 1,600 lbs. of a superior article of printing paper per day. The establishment will be the means of disbursing in this vicinity, for labor and materials, many thousand dollars which have heretofore been expended elsewhere.

"WHEAT AND BROMUS."—We observe in a Boston paper, an article with this heading. On reading it, we find it is an advertisement that an individual residing at Lancaster, Mass., offers for seed both wheat and "*Bromus*." It will probably be recollected by most readers, that the term *Bromus* comprehends a genus of grasses, of which the well known "cheat," or "cheat," (*B. secalinus*) is a species. It is hardly necessary to say that this is a great enemy to the farmer; and where suffered to grow among wheat, greatly depreciates the value of the crop. The genus comprises several species, some of which have formerly been cultivated as an experiment, as pasture or meadow grasses, but have been abandoned on account of their trifling value. The "field broome grass," (*B. arvensis*), is, however, thought to possess some value for certain pastures, on account of its early growth, affording a bite for sheep and lambs. But most

species are not much relished by stock. We do not know what species the individual alluded to, cultivates; but we think persons who wish to obtain seed wheat that will not "turn to chaff," would do well to be cautious, lest some of the seed of the lauded "bromus" may be amongst it, and should prove to be the very thing which they should especially avoid.

SHORT-HORN CATTLE.—We are informed that **GEORGE VAIL, Esq.**, of Troy, has lately purchased of **Messrs. LATHROP**, of South-Hadley, Mass., eight Short-horn cows and heifers. This herd has been well known for several years, and has comprised excellent animals. We are told that those purchased by **Mr. VAIL** are mostly descended from a cross made with the bull **Yorkshireman**, bred by the late **THOS. BATES**, and imported by **Mr. COPE**, of Pennsylvania. We may say in this connection, also, that **Mr. VAIL** reserved, at his late sale, fourteen head of his former herd—numbering most of his imported cows and their immediate offspring, by the bulls **Duke of Wellington** and **Meteor**. He will continue to use **Meteor** and **Fortune** until he shall receive a bull of the "Duchess tribe" from England—having already sent out an order for such an one, as well as for two more heifers of the same family. We are glad to see that his enterprize and zeal continue unabated.

MOWING MACHINE.—**Mr. MORGAN BUTLER**, of New-Hartford, Oneida county, informs us that he has used **Ketchum's** mowing machine for two seasons, and can cut with it an acre of grass per hour, with one pair of horses; that it cuts "as smooth as any farmer could wish;" leaves the grass spread evenly over the ground; that it will cut lodged grass, and that which is fine at bottom. He states that it is manufactured by **G. W. ALLEN & Co.**, Buffalo. Price \$100 to \$115.

THE VERMONT STATE FAIR at Middlebury, on the 10th and 11th September, will afford an excellent opportunity for seeing **Black-Hawk** and other stocks of horses—it being the intention of the breeders to make a full display on that occasion. A great gathering will also be made of the different families of **Merino** sheep—both of recent importations, and the most noted descendants of former ones.

GOOSEBERRIES.—We are indebted to **OLIVER PHELPS, Esq.**, of Canandaigua, for a basket of very superior gooseberries, of the **White-smith** variety. **Mr. P.** has always had great success in the culture of this fruit,—seldom having had any blight; and he attributes the exemption to the bushes being syringed with soap-suds, while the fruit is forming.

HARROW AND GARDEN RAKE.—We thank our New-Brunswick friend for his kindness in sending drawings of these implements. The harrow he describes would, we presume, work well on new or rough land, but we do not see that it has any advantages over the "improved Scotch harrow," of which we may furnish a cut. The rake is similar to one in use here.

☞ The fancy in the poultry line, will find the Spanish fowls advertised by **Mr. LOVETT**, the genuine article.

Cattle Shows and Fairs this Autumn.

STATE EXHIBITIONS.

NEW-YORK.—To be held at Rochester—all articles to be entered and to be on the ground before 12 o'clock on **Tuesday, Sept. 16**. On **Wednesday** the exhibition will be open only to the Judges, Guests, and Members of the Society—(any person can become a member by the payment of \$1.) On **Thursday** and **Friday**, it will be open to all. Tickets of admission, 12½ cents.

AMERICAN INSTITUTE, New-York—Oct. 1, the Fair at Castle Garden will open to visitors at 8 P. M.,—6th, special exhibition of Dahlias and Roses at Castle Garden—7th, testing of Plow at White Plains—8th, plowing and spading match at White Plains—15th, 16th, 17th, cattle show at Madison Cottage, corner of Fifth avenue and Twenty-third street. Entries may be made on the 13th, 14th, and 15th, on the ground, or at any time previous by addressing **A. Chandler, Cor. Sec.**, 351 Broadway—16th, anniversary address, in the evening, by **Dr. CHARLES T. JACKSON**, of Boston.

VERMONT.—In pursuance of a call made by over two hundred of the agriculturists and raisers of stock in this State, a public meeting was holden at Middlebury, on the 16th June, 1851, at which it was resolved that a State Fair be holden at Middlebury, on the 10th and 11th days of September next. The main object of the Fair is to make an exhibition of our stock, our cattle, our horses, and our sheep. The public may be assured that the best specimens of **Black Hawk** colts, **Morgan**, **Hamiltonian**, and **Exclipse** stock, and of **French** and **Spanish Merino**, and other breeds of sheep, the best **Durham**, **Ayrshire**, **Hereford**, and **Devonshire** cattle, will be exhibited, and also the best specimens of native cattle, including oxen, cows, and young cattle. Officers and committees were appointed to carry the above resolution into effect—President, **Hon. F. HOLBROOK**, Brattleborough—Secretary, **Maj. E. R. WRIGHT**, Middlebury.

NEW-HAMPSHIRE.—The State Fair is to be holden at Manchester—time not stated.

RHODE-ISLAND.—At Providence Sept. 10, 11, 12.

GEORGIA.—At Macon, Oct. 29, 30, 31.

OHIO.—At Columbus, Sept. 24th, 25th, and 26th.

PENNSYLVANIA.—At Harrisburgh, in October.

CANADA WEST.—Grand Provincial Exhibition at Brockville, Sept. 24, 25, 26th.

State Fairs are also to be held in *Maryland* and *Michigan*, but at what time and places we are uninformed.

NEW-YORK COUNTY SOCIETIES.

ONEIDA.—At Utica, Sept. 9, 10, 11 and 12.

SARATOGA.—At Mechanicsville, Sept. 9, 10, and 11.

ESSEX.—At Elizabetown, Sept. 17 and 18.

LEWIS.—At Turin, Sept. 10, 11. Address by **Hon. HORATIO SEYMOUR** of Utica.

CATUGA.—At Auburn, Oct. 1, 2.

GREENE.—At Coxsackie, Sept. 24, 25.

OSWEGO.—At Oswego, Sept. 10, 11.

FARMER'S SOCIETY of Otsego county, at Louisville, Sept. 25, 26.

JEFFERSON.—At Watertown, Sept. 10, 11.

DUTCHESS.—At Washington Hollow, Oct. 1, 2.

Albany Prices Current.

ALBANY, August 11.

FLOUR.—The demand for flour during the month has been very limited; the trade buying only for immediate wants, and that from the East and River being very light. Quotations show a decline in prices, and the tendency is still downward. Accounts from all sections of the Union, almost without an exception, unite in stating that the new crop of wheat will be more than an average one, and that the quality will be excellent. This will be so more especially with our own State, the samples already shown, bearing evidence of the excellence of the crop, and those shown in this city from **Maryland**, **Virginia** and **North Carolina**, in plumpness and brightness, compare favorably with the best samples of **Genesee**. Of the condition of the Canadian wheat crop, of which we had such bountiful supplies, we have heard but little, and that is favorable. The low prices at which flour now rules has attracted the attention of shippers, and notwithstanding the depressed state of the English market for breadstuffs, large shipments are making from New-York, the quantity sent forward since the 1st of July, from New-York alone, being 308,788 brls. of flour and 235,537 bushels of wheat, against

77,985 brls. of flour and 100 bushels of wheat, for the corresponding period of last year. The quotations in Liverpool on 26th ult. were, Western Canal 19s. 6da20s. 6d., Canadian 20s. 6da21s. 6d., Philadelphia 20s. 6da22s., Baltimore, &c. 20s. 6da22s., Ohio 20a21s. The sales here during the month have been about 26,000 brls., closing at \$3.75a\$3.87½ for Illinois, Wisconsin and common Michigan, \$3.87a4 for straight State and good Michigan, \$4.06a4.12 for Ohio, and \$4.06a4.18 for Genesee; fancies and extra rule irregularly from \$4.50 to \$4.25.

GRAIN.—The crop of new wheat of this State is now coming to market; the first sales were made on Friday last; both lots were afloat; one, a parcel of 1600 bushels from Wayne co., sold at 106c., for milling here, and the other, 1000 bushels, part of a load of 2600 bushels, from Onondaga county, sold at 106c. to go East. The first sale of new Genesee wheat last year was made on the 8th of August at 130c. to arrive, but the first sale made afloat was on the 9th of August, 1400 bushels Wayne county, at 128c. In 1849 the first sale was made at 133½c.; flour selling here both years at the times mentioned, at \$5.75a5.87 for pure Genesee; the same quality of flour can to-day be purchased at \$4.06½a\$4.18½. The other sales of wheat during the month were at 92½c. for White Ohio, 100c. for Michigan slightly mixed with Genesee, and 107a108c. for Genesee; the sales reached 10,000 bushels.

In Rye we have no sales to report. Oats have fallen off both in supply and demand; the receipts of Western during the season, have been to a fair extent, but the bulk of the arrivals have been in an unsound condition; the sales during the month have been about 150,000 bushels, closing at 40a41c. for fair to good samples of Western, and 42a43c. for State. Corn continues to come forward very freely, especially Western Mixed, the greater portion of which is in an unsound condition and prices for this description range from 44a53c. for heated and damaged; the sales of the month add up 250,000 bushels, including damaged, quoted above, and 55½ for Western mixed and yellow round. The new crop of Barley is represented to be in good condition. Some samples have already been exhibited and contracts for future delivery made, but not to any great extent; the recent sales to arrive are 4,000 bushels two rowed, Jefferson county, to arrive by the first boats, at 75c., and 3,000 do. four rowed from Niagara county, to arrive by 8th Sept., at 70c. The quotations at Liverpool, on 26th ult., were, Wheat, white Genesee, 6a6s. 1d. per 70 lbs.; mixed do. 5s. 6da5s. 9d.; red do. 5s. 2da5s. 6d.; white Canadian 6s. 2da6s. 10d.; red do. 5s. 8da5s. 10d. Indian Corn, white, per 480 lbs. 29a30s, mixed do. 26s. 3da27s.; yellow flat 26s. 6da27s., and do. round 26s 6da27s. 6d.

FEED.—The sales are about 40,000 bushels at 10c. for bran, 15a17½ for second quality and 100a106½ for fine.

WHISKEY.—The supply during the month for this market has been rather moderate; the sales have been about 600 brls.; the market closes at 23½a23¾ for Ohio, 23¾ for State and 24c. for S. P. brls.

PLASTER.—Quotations for Nova Scotia are steady at \$2.25, with free sales.

HOPS.—The quantity in market is very light; sales are making of the crop of 1850 at 55a60c.

PROVISIONS.—The retail demand is steady and quotations are unchanged; we quote new mess pork \$15a15.50, do. prime \$13. Beef, mess \$10a10.50 and \$6a6.25 for prime. Hams, 8½a10c. for smoked, and 7a7½c. for shoulders in pickle, hams 7a8c., and shoulders 6a6½c. Lard 9a9½c. Butter, 12a14c. for State. Cheese 5a7c. Included in the sales were 7500 lbs. pickled hams for California p n t, and 50 lbs lard 9½c.

SALT.—Bag salt is in steady demand at 9½c. for 20 lbs. and 8c. for 14 lbs.

WOOL.—The operations in this market have been on a limited scale; the tendency of prices of all grades is downward. A sale of 10,000 lbs. medium fleece on private terms is the only transaction which has come to our notice.

New-York State Fair

In Rochester, Sept. 15th, 16th, 17th, 18th and 19th.

THE subscriber has been appointed local secretary, of the New-York State Agricultural Society at Rochester. Any inquiries respecting matters connected with the arrangements of the show grounds for the Fair, may be addressed to me.

Persons having articles for exhibition, who cannot accompany them to Rochester, can consign them to me, and I will see that they are taken proper care of, and the necessary entries made at the business office.

Rochester, Aug. 1, 1851—21.

Local Secretary.

SENECA LAKE HIGHLAND NURSERIES,

Catharine, Chemung Co., N. Y., near Havana Depot, New-York and Erie Railroad.

LARGE size Fruit Trees for Orchard planting, all kinds. Dwarf Trees for yards, of the Pear, Cherry, and Apple, bearing size. Ornamental Trees and Shrubs, Deciduous and Evergreen. Climbers, Grape-vines, Raspberries, Gooseberries, Currants, Strawberries, Cranberry vines, Green-house Plants, Roses, Dahlias. The new and unequalled fall and winter apples, Douse or Hawley, and Wagener. Nursery Stock—Persons wishing trees to plant or sell, are referred to this fall's Descriptive Catalogue, for the great and unequalled inducements offered, as to PRICE and QUALITY, which will be furnished gratis, on application by mail.

Packages amounting to \$10, will be sent free of charges, on the Erie Railroad, to New-York and Dunkirk, or any intermediate station. Sept. 1, 1851—11. E. C. FROST.

Fruit and Ornamental Trees, at Cleveland, Ohio.

GIRTY & ELLIOTT.

THE collection of trees offered for sale by us this fall, has been selected and grown with great care. It embraces a large variety, including all the best varieties of Fruits; as well as all the new Shrubs, Roses, Evergreens, &c., &c., that have been brought into notice for a few years past.

Standard Pears of one, two and three years growth.

Dwarf do do do do do

Standard Apples, do do do do do

Dwarf do do do do do

Standard Cherries, do do do do do

Dwarf do do do do do

Plums, Apricots, Nectarines, Peaches, Grapes, Currants, Raspberries, Strawberries, Gooseberries, &c., &c.

EVERGREENS,

Of Norway Spruce, Deodar Cedar, Cedar of Lebanon, Tree Box, English Yew, Auricularian Pines, and Balsam Firs. Our stock is very good, and among them many of extra large size. All the new Pines, Spruces, etc., etc., are on hand, and for sale, of common sizes.

15,000 Balsam Firs, small—20,000 American Arbor Vitæ, small—1,500 yards Dwarf Box, for Border Edgings, very fine and thick. Hardy Azaleas, Rhododendrons, Kalmias, &c.

ROSES.

A very large collection of Roses, and nearly all grown on their own roots, comprising the best selections of Remontants, Bourbons, Chinas, Teas, Moss, and climbing varieties.

Green-house plants in variety, and at low prices. Catalogues will be issued, ready for delivery, on the 1st of September, and forwarded gratis to post-paid applicants. GIRTY & ELLIOTT. Sept. 1—31.

Important to Farmers and Planters.

MR. EDITOR—Through your columns, especial attention is invited to the following—

AT the next annual State Fair, to be holden at Rochester, in September next, I design to present for competition, a small *Portable Steam Grist Mill* (Conical Burr Stone) got up in a much more simple and cheap form than has ever before been exhibited; and challenge all manufacturers of Mills to a test; and that I will operate one of these Cone Mills, on the Fair ground, with 25 per cent less power than any other kind of mill that is made, doing the same amount of work in the same given time.

CHARLES ROSS,
Rochester, New-York.

EXTRACT FROM THE TRANSACTIONS of the New-York State Agricultural Society, 1848:—Another labor saving Machine, useful to the stock feeder, was offered in a *Portable Grist Mill*, with Burr Stone, horizontally placed, and capable of grinding seven bushels of food per hour.

As ground food for cattle leads to rapid fattening, these and such like Machines, may well claim the Farmer's attentive consideration. B. P. JOHNSON, Secretary.

Agricultural Rooms, Albany, September 23d, 1850.—C. Ross, Dear Sir:—In 1849, the Committee says, "that your *Portable Grist Mill*, performs well, and has been so often commended, that this Committee think they cannot add to its reputation.

B. P. JOHNSON,
Secretary N. Y. State Ag. Society.

N. B.—This Mill has taken the highest premium at the State Fair, for the last four years, it having been exhibited and worked by horse power, at Saratoga, Buffalo, Syracuse and Albany.

From the Georgia Telegraph—Extract from Ex-Governor Troup, "Communication." Mr. Editor:—Valdosta, Laurens county Georgia.—I have tried the Patent Conical Burr Stone Mill, for grinding Corn, and have found it to answer admirably. No Planter that is not in the vicinity of a public Mill, ought to be without one, if he can afford to purchase, and his family is sufficiently large to require the use of it, otherwise I would suggest that several Farmers of a neighborhood, should unite to purchase one, in common, which being established in a central position, would be accessible to all.

Very respectfully, G. M. TROUP.

Any further information may be obtained by letter, post-paid, or by calling on CHARLESS ROSS, Curtis' Buildings, Rochester, New-York. Sept. 1—11.

Colman's European Agriculture.

EUROPEAN AGRICULTURE, from personal observation, by HENRY COLMAN, of Massachusetts. Two large octavo vols. Price, when neatly bound, the same as published in Nos., \$5. For sale at the office of THE CULTIVATOR.

GUANO.

THE subscriber has just received his supply of Peruvian Guano by ship Diadem, put up in bags weighing about 100 lbs. each, at 2½ cents per lb. GEO. H. BARR, Sept. 1—11. State Agricultural Warehouse, 25 Cliff-st., N. Y.

HORSE POWERS.

EMERY'S, KELL'S, and WHEELER'S Railway Horse POWERS, for sale at the STATE AGRICULTURAL WAREHOUSE, Sept. 1—11. No. 25 Cliff-street, New-York.

Devon Bull for Sale.

THE subscriber will sell at auction, at the State Fair, Rochester, (if not previously disposed of,) his prize Devon Bull. He is five years old the past spring,—received the first prize of the N. Y. State Ag. Society, as the best Devon bull, in 1849. He was from an imported cow, and by a bull bred by Mr. Patterson, of Maryland. He is docile, and good tempered—is in sound health, and in every respect a good specimen of this esteemed breed.

R. H. VAN RENSSLAER, Sept. 1—11. Morris, Otsego county, N. Y.

TO WOOL GROWERS.

THE subscriber would again solicit the attention of those who wish to improve their stock of sheep to his flock of Merinoes, believing them to be equal to any, producing as much wool of a good quality, from a given amount of feed, as any flock that can be found. His flock consists of ewes and a few bucks. Bred pure from the importation of Consul Jarvis—bucks and ewes bred from Jarvis' ewes and a French Merino buck purchased of J. A. Tainter, Esq. Also a lot of lambs from an Atwood buck. Those wishing to purchase will do well to call and examine before purchasing elsewhere. Prices will be made reasonable to suit customers. For further particulars inquire of the subscriber. A. H. AVERY.

Galway, Saratoga co., Sept. 1—11.*

Superior Cultivated Bell Cranberry Plants.

THIS new variety of the Cranberry, grown and cultivated upon ordinary upland, is intended expressly for garden and field culture, being extremely hardy, vigorous and productive well suited to almost any soil and location.

The vines can be sent to any part of the United States in the root, carefully packed in boxes at \$7 per thousand or can be furnished growing in ornamental pots forming a beautiful ornament for the window, garden, or greenhouse. Price \$2 per pot.

Persons wishing for plants should order previous to the first of October next. Full printed directions accompany the plants.

Circulars giving full information, or specimen plants sent gratis, to all post paid applicants. Address F. B. FANCHER, Gen. Agent, Sept. 1—21.* Horticulturist, Lansingburgh, New-York.

IMPORTED DEVON BULL FOR SALE.

THE subscribers will offer for sale at the auction held on the closing day of the State Agricultural Society's Show, at Rochester, in September next, (if not previously disposed of,) their thorough bred imported north Devon bull "Megunticook," which took the first prize at the fair of the American Institute in October, 1850.

Megunticook is now five years old, and was purchased by us from George Turner, of Barton, near Exeter, England, in the autumn of 1848, by whom he had been used the previous season. He was bred by Mr. Baker, of Devonshire, out of a cow got by "Silifant," one of James Quarterly's best animals, for which he got 100 guineas:—sire Prince Albert, which took the first prize at the Royal Ag. Soc. Show at Southampton in 1846; and was afterwards sold by Mr. Turner to the French government for 120 guineas. He is a very sure getter; and uncommonly gentle.

W. P. & C. S. WAINWRIGHT, Sept. 1, 1850—11.* Rhinebeck, Dutchess county.

HURDLE FENCE FOR FARMERS.

A NEW and improved fence, much superior to anything of the kind now in use, formed of wrought-iron, possessing therein an unusual degree of elasticity and strength; when properly constructed and well placed, they will endure for years and never need repair. The improvement consists in the mode of security. The rails or wires instead of the eyes used in the older kinds through which the bolts pass to bind and strengthen the fabric, the fence is now made in sectional parts with slats in the posts so arranged that when in place they break joints with each other. This slat in one section extends upwards and in the other downwards and each rail is furnished with a loop or dead eye, turned on each end, which prevents it from passing through the slats. The usual screw is placed a distance of about three hundred feet apart and the entire fence may be tightened and prepared on the ground before it is set up. The iron clamps, foot of each post, are so turned as to present a flat surface of resistance to the earth. Price \$1.50 per rod, 12½ cents additional if painted. For sale by the patentee agent,—where samples can be seen. A. LONGETT, Office of the State Agricultural Warehouse, Sept. 1—11. No. 25 Cliff-street, New-York

PARTNER WANTED.

THE advertiser has one of the best vegetable farms in New-England, and is desirous of obtaining a partner to take an equal interest in the raising of vegetables, the farm having been devoted to that purpose for some time past—some 60 acres are now heavily cropped with summer and winter vegetables, and the sales from the farm will amount to about \$7,000 this year. An active single young man that can furnish \$3,000 would be preferred. The farm is within a very short distance of a market that takes all the produce of the place at high prices. Any gentlemen wishing to establish a son in a safe agricultural business would find this a good opportunity. Address B. H., Office Albany Cultivator. Sept. 1—11.

Golden Australian Wheat,

RAISED by Samuel L. Thompson, Esq., on Long Island, for sale in lots to suit purchasers. CANADA WHITE FLINT, a superior article, also Mediterranean and Red wheat, for sale by GEO. H. BARR, Sept. 1—11. State Agricultural Warehouse, 25 Cliff-st., N. Y.

Highland Nurseries, Newburgh, N. Y.

A SAUL & CO. have the pleasure to announce to their patrons and the public in general, that their stock of FRUIT AND ORNAMENTAL TREES, SHRUBS, &c., which they offer for sale the coming autumn, is of the very best quality; and embraces everything in their line that can be procured in the trade.

Dealers and planters of trees on a large scale, will be treated with on as liberal terms, as can be done by any establishment of reputation in the country; they flatter themselves that for correctness of nomenclature of fruits, (which is a serious consideration to planters) that their stock is as nearly perfect as can be, having all been propagated on their own grounds, from undoubted sources, under the personal supervision of Mr. Saul.

They have propagated in large quantities, all the leading and standard varieties, which are proved to be best adapted for general cultivation, especially those recommended by the American Pomological Congress, at its several sessions, as well as all novelties, and certain kinds particularly suited to certain sections and localities of the Union, and the Canadas.

Their stock of Pear trees is the largest they have ever had to offer for sale, and among the largest in the country, and consists of over 50,000 saleable trees.

The stock of Apple trees is also very large, as well as Plums, Cherries, Apricots, Peaches, Nectarines, and Quinces, also Grape-vines, Gooseberry, Currant, Raspberry, and Strawberry plants in great variety, &c. &c.

Also Pears on Quince, Cherry on Mahaleb and Apple on Paradise stocks, for pyramids and dwarfs for garden culture, and of which there is a choice assortment of the kinds that succeed best on those stocks.

Deciduous and Evergreen Ornamental Trees and Shrubs.

100,000 Deciduous and Evergreen Ornamental Trees, embracing all the well known kinds suitable for street planting, of extra size; such as Sugar and Silver Maple, Chinese Ailanthus, Horse Chestnut, Catalpa, European and American Ash, Upright lentiscus leaved Ash, Upright gold barked Ash, Flowering Ash, Three Thorned Acacia, Kentucky Coffee, Silver Abele Tree, American and European Basswood or Linden, American and European Elm in several varieties, &c. Also all the more rare and select, as well as well known kinds suitable for Arboretums, Lawns and door-yard planting, &c.; such as Deodar and Lebanon Cedars; Auracaria or Chilian Pine; Cryptomeria japonica; the different varieties of Pines, Firs, Spruces, Yews, Arborvitae, &c.

WEeping TREES.—New Weeping Ash, (Fraxinus lentiscifolia pendula,) the old Weeping Ash, gold barked Weeping Ash, Weeping Japanese Sophora, Weeping Elms (of sorts,) Umbrella Headed Locust, Weeping Mountain Ash, Weeping Willow, Large Weeping Cherry, Weeping Birch, Weeping Beech, &c. &c.; together with every variety of rare Maple, Native and Foreign; Flowering Peach, Almond and Cherry; Chestnuts, Spanish and American; Purple and Copper Beech; Judas Tree, Larch, Gum Tree, Tulip Tree, Osage Orange, Paulownia, Mountain Ash, (American and European,) Magnolias of sorts, with many other things—including some 200 varieties of Shrubs, Vines, Climbing and Garden Roses in great variety; such as Hybrid Perpetuals or Remoutants, Hybrid China, Hybrid Bourbon, Hybrid Damask, Hybrid Provence, Bourbon, Tea, China, Noisette and Prairie Roses; also Herbaceous plants in great variety, &c. &c., for which see Catalogue, a new edition of which is just issued, and will be forwarded to all post-paid applicants.

A large quantity of Arborvitae for Screens, and Buckthorn and Osage for Hedge plants.

Newburgh, Sept. 1, 1851—21.

To Farmers, Gardeners and Nurserymen.

THE Lodi Manufacturing Co. offer for sale a freshly prepared article of Poudrette for fall use. It will be found a cheap, handy and lasting manure upon grass preceded by wheat or rye, also upon turneps, celery, &c. It has been found of great use upon lawns as a top dressing, and grass lands generally. It has also received great commendation for its efficacy upon trees and shrubs, particularly Evergreens and ornamental trees. Reference is made to A. J. Downing, Esq., B. M. Watson, Plymouth, J. M. Thorburn & Co. and others—also to the following letter:

Extract from a Letter of Hon. Daniel Webster, dated

WASHINGTON, March 10, 1850.

"If I neglect the annual purchase of some of this article, my gardener is sure to remind me of it. He thinks it almost indispensable, within his garden fence; but there are uses, outside the garden, for which it is highly valuable, and cheaper, I think, than any other manure, at your prices. A principal one, is the enrichment of lawns and pleasure grounds, in grass, where the object is to produce a fresh and vigorous growth in the spring. Our practice is to apply it when we go to town in the autumn, and we have never failed to see its effects in the Spring."

Price of Poudrette \$1.50 per bbl. for any number over six barrels—and of Poudrette for shrubs, \$2.00 per bbl. for any quantity—in both cases delivered free of cartage on board of vessel in New-York.

Five shares of stock for sale in the Lodi Manufacturing Co. Dividend payable in Poudrette. Apply to the LODI MANUFACTURING COMPANY, 74 Cortlandt st., New-York. Sept. 1—21.

Mediterranean Wheat.

THE reputation this wheat has obtained for a few years past, has put it beyond doubt, that it is the very best variety for our climate and soil—being so early, it entirely escapes the ravages of the Fly. We have now a choice lot on hand, and offer for sale, at the Albany Agricultural Warehouse and Seedstore, 369 & 371 Broadway, Albany. EMERY & CO.

THE WATER CURE JOURNAL.

A NEW Volume of this "Journal of Health" commences in July, 1851. Subscribers should send in their names at once. The Philosophy and Practice of Hydropathy, Physiology and Anatomy of the Human Body, Dietetics, Physical Education, the Chemistry of Life, and all other matters relating to Life, Health, and Happiness, will be given in this Journal. We believe that man may prolong his life much beyond the number of years usually attained. We propose to show how. Published monthly, at One Dollar a year, in advance. Please address all letters, post-paid, to

Aug. 1—2t. FOWLERS & WELLS,
131 Nassau street, New-York.

PARKER & WHITE,

MANUFACTURERS of Garden Implements and Farm Machines, and growers and Importers of SEEDS and TREES, 9 and 10 Gerrish Block, Blackstone-st., Boston. April 1—4t.

Best Fruit Book.

Sent by Mail free of postage.

J. J. THOMAS' American Fruit Culturist, with 300 illustrations, new (6th) Edition just published, price \$1.00, on receipt of which post-paid, we will forward a copy by mail, to any P. O. in the United States, free of postage. Address
July 1—3t. DERBY & MILLER, Auburn, N. Y.

Youatt's Great Work on the Horse.

Sent by Mail, post-paid.

NOW ready, a new edition of "Youatt on the Structure and Diseases of the Horse, with their Remedies," also practical rules to buyers, breeders, breakers, &c., brought down to 1849 by W. C. Spooner, the celebrated English Veterinary Surgeon, to which is prefixed an account of the breeds in the U. S., by H. S. Randall, Esq., with 55 illustrations—price \$1.50, on receipt of which post-paid (if mailed in presence of P. M., at our risk,) we will forward the work, postage paid to any P. O. in the U. States. Address, post-paid,
July 1—3t. DERBY & MILLER, Auburn, N. Y.

Fruit and Ornamental Trees, &c.

THE subscribers solicit the attention of Nurserymen, Orchardists, and Amateurs, to their present large and fine stock of Nursery articles.

Standard Fruit Trees for Orchards—Thrifty, well grown and handsome, of all the best varieties.

Dwarf Trees for Gardens—The largest stock in the country, and the most complete.

Dwarf Pear Trees—Our collection consists of well known leading varieties, and numbers more than 150,000 saleable trees. The superiority of these, being grown in this country, over imported trees, is well known to every intelligent cultivator. Nothing in fact in this country, can equal our collection of Pear Trees; they can be had from one to four years growth, some of which are now covered with fruit.

Dwarf Apple Trees—We cultivate in large quantities, the best and handsomest varieties of Apples on Doucain and Paradise stocks, for Dwarf and Pyramids, and can furnish them in large quantities from one to two years growth.

Dwarf Cherry Trees—All the leading varieties are cultivated, on Mahaleb stocks, extensively. We can furnish by hundred and thousand, from one to two years growth.

Cherry Currant—The largest variety known. Upwards of 1000 plants on hand.

English Gooseberries—All the best sorts.

Large Fruited Monthly Raspberry, that gives a crop of fine Fruit in the Autumn.

Strawberries—All the best sorts.

Ornamental Shade Trees—Of good size for Streets, Parks, &c., large and well grown.

Choice Trees and Shrubs, for lawns and pleasure grounds, including all the finest new and rare articles recently introduced.

Hardy Evergreen Trees—Norway, Spruce and Balsam Fir, of small size in large quantities, and a moderate supply of large ones, besides nearly Fifty new and rare Evergreens, including Deodar Cedar, Cedar of Lebanon, Chili Pine, Cryptomeria or Japan Cedar, Himalayan Spruce, &c. &c.

Roses, Paeonies—A large and complete collection, including the finest novelties.

Phloxes—A collection of upwards of 60 varieties, including 30 new varieties imported last spring.

Dahlias—Upwards of 100 select varieties, including the finest English prize flowers of 1849 and 1850.

The following catalogues, giving full information as regards terms, prices, &c. will be sent gratis, to all who apply by post-paid letters, or at the office:

- 1st. A general descriptive catalogue.
- 2d. A wholesale catalogue.
- 3d. Catalogue of Select Green-House Plants.
- 4th. A special catalogue of Dahlias and Bedding Plants for 1851.

ELLWANGER & BARRY,

Mount Hope Garden and Nurseries, Rochester, N. Y.
August 1, 1851—2t.

SAXTON'S COTTAGE AND FARM LIBRARY,

Volume First now ready.

THE Cottage Bee-keeper: or, Suggestions for the Practical Management of Amateur and Cottage Apiaries, on scientific principles, with an appendix of notes, chiefly illustrative. By a country Curate. Price 50 cents. To be followed by others, forming the most complete Series of PRACTICAL AND USEFUL BOOKS that has been offered to the American public for many years.

Aug. 1—2t. C. M. SAXTON, 152 Fulton, st., N. Y.

ANALYTICAL LABORATORY,

Yale College, New-Haven, Connecticut.

JOHN P. NORTON, PROFESSOR OF SCIENTIFIC AGRICULTURE.

THIS Laboratory is now fully organized for instruction in all branches of analyses connected with the examination of soils, manures, minerals, ashes, animal and vegetable substances, &c. Full courses are given in each of these departments, and also in general Chemistry, both organic and inorganic.

Students can thus fit themselves to become instructors in the various branches of Chemistry, or to apply so much of that and kindred sciences as may be necessary to the practical pursuit of agriculture or manufacturing. The demand for teachers and Professors in the various branches of chemistry, especially Agricultural, is now great and increasing, so that this is now a fair field for those who have a taste for such pursuits.

A course of Lectures on Scientific Agriculture, by Professor Norton, commences in January of each year, and continues for two and a half months. This course is designed especially for the practical farmer, and has given great satisfaction to those who have attended it in previous years. It embraces a plain connected outline of the leading points in improved agriculture, treating in succession of the composition of the soil, the plant and the animal; of their connections with each other, and of all the improvements in cultivation, manuring, feeding and fattening, which have been adopted in the best agricultural regions. This course is made so plain and practical, that the farmer who attends it can understand the whole, and apply it in his own experience.

More can be learned by attendance upon such lectures, by reading in connection with them, and by associating with others who are also desirous of obtaining a better knowledge of their profession than in years away from such advantages. The young farmer learns to think for himself, to see that a practice is not necessarily right because it is old, to understand the reasons for all that he does, and with this increase of knowledge is better able to make farming profitable as well as interesting.

Board and lodging may be procured at from \$2 to \$3 per week, and the Ticket for the Lecture is \$10.

In connection with the Lecture is a short Laboratory course, by means of which those who desire it, are taught to test soils, manures, marls, &c., in a simple way, and to make many elementary examinations of a highly useful character. The charge for this course is \$25.

To those students who go through the full Laboratory course, the charge is about \$200 per annum, and they can be admitted at any period of the year at a proportional charge.

For further information apply to Prof. JOHN P. NORTON, New-Haven, Conn.
June 1, 1851—St.

DRAIN TILE WORKS, ALBANY.

60 Lancaster Street, west from Medical College.

THE subscribers are manufacturing a superior article of Drain Tile of different sizes and shapes at prices from \$14 to \$20 per thousand pieces, which are used for land draining. The Tile are over one foot in length and formed to admit the water at every joint, effectually draining the land from 12 to 20 feet each side of the drain. 1000 Tile will lay 1200 feet of drain, being the cheapest and most durable article used. We have on hand Tile sufficiently large and well calculated for Cellar, Cistern, Yard and Sink drains, from 2 to 25 cents per foot. Call at our office, and at the Agricultural Stores at Boston, Providence, Springfield, Hartford, New-Haven, Bridgeport, New-York, Newark, Philadelphia, Alexandria, Baltimore, Schenectady, Utica, Syracuse and Rochester, and examine the article.
July 1—4t. A. S. BABCOCK & CO., Albany.

DRAIN TILES.

THE STATEN ISLAND DRAINAGE TILE COMPANY are now prepared to supply Agriculturists with the above named tiles of the most approved patterns.

2	inch pipes, one foot in length, per thousand,	\$9 00
2½	do do do do do	10 00
3	do do do do do	12 00

And pipes and Horse-shoe Tiles of all sizes, at corresponding prices. The establishment is at *Latourette's Point, Fresh Kills*, near *Richmond, Staten Island*, and boats drawing four feet water can enter the yard and load at the kilns. Address

H. K. BALL, Stapleton, S. I.

The Tiles will be found on sale at A. B. ALLEN & CO.'S, Nos. 159 and 191 Water-Street, N. Y., and at GEO. H. BARR'S State Agricultural Warehouse, No. 25 Cliff-Street, New-York.
Staten-Island, Aug. 1—tf.

MANURES.

PERUVIAN GUANO at 2½ cents per lb.
Bone Dust, Sawings, Shavings, and Crushed, at \$2.25 per bbl.
Bone Black, or Burnt Bones, at \$3 per hogshead.
Bone Waste, or Bone Manure, at 1½ cents per lb.
Sugar House Scum, or Bullock's Blood, at \$2.50 per hogshead.
Sulphate of Soda at 1 cents per lb; packages included at the above prices. For sale at the State Agricultural Warehouse
June 1—4t. G. H. BARR, No. 25 Cliff-street, New-York.

Cottage Buildings, &c.

THE AMERICAN ARCHITECT—Now complete in 24 numbers, at 25 cents each single, or \$5 for the work complete in numbers; \$6 bound in two vols.—the whole containing 24 beautiful designs for country residences, with plans, elevations, and estimates, varying from \$600 to \$5000. This is one of the most desirable architectural books ever published in this country or England.

Also, **THE AMERICAN STAIR BUILDERS' GUIDE**, in one vol. octavo, with numerous illustrations. Price \$2.

Published by C. M. SAXTON, 152 Fulton street, and for sale by all the booksellers. New-York, August 1—21.

GREAT PREMIUM BOOK.

STEPHEN'S BOOK OF THE FARM.

A Complete Guide to the Farmer.

A NEW and complete edition, revised and adapted to the use of Farmers in the United States, by

J. S. SKINNER.

This Book contains about 1200 pages, and embraces EVERY SUBJECT OF IMPORTANCE, connected with Agriculture in all its branches, with nearly FIVE HUNDRED ILLUSTRATIONS on wood and steel, making it one of the most attractive and USEFUL BOOKS

yet offered to the Farmers in this country. Showing the best methods for acquiring a thorough knowledge of practical husbandry, with a portrait of the American Editor.

The publisher makes the following liberal offer to Farmers and clubs in order that every one may possess this valuable EVERY DAY REFERENCE BOOK.

Single copies bound in two vols. cloth,.....	\$4.00
Two " " cloth,.....	7.00
Five " " ".....	16.25
Ten " " ".....	30.00
Single " " leather,.....	4.50
Two " " ".....	8.50
Five " " ".....	18.75
Ten " " ".....	35.00

C. M. SAXTON,
Agricultural Book Publisher,
152 Fulton st., New-York.

Aug. 1—21.

Farm in the Genesee Valley for Sale.

THE subscriber offers for sale his Farm of 212½ acres, situated in the town of Avon, Livingston county, N. Y., and formerly known as the Tompkins farm.

On the premises there is a new dwelling house, in the Ornamental English Cottage style. The grounds are tastefully laid out with gravel walks and planted with shrubbery. The gardens contain choice varieties of peaches, grapes, &c., and the orchards the best grafted fruit. Attached are a carriage and ice house, barns and tenants houses. The farm is acknowledged to be one of the finest wheat farms in Western New-York.

It has been for years under the most careful and judicious cultivation—is highly improved and in a perfect state of repair. There are about 40 acres of woodland with superior timber.

The Buffalo and Conhocton Railroad now in progress passes thro' the town. The Genesee Telegraph line has an office in the place. The farm is distant about 3 miles from the Avon Sulphur Springs. This place offers inducements to purchasers. For further particulars apply to

HENRY L. YOUNG, Avon, N. Y.

July 1—1f.

FARM FOR SALE.

THE subscribers offer for sale the farm, late the property of, and now occupied by Mr. Charles Van Eps, in the town of New-Scotland, Albany county. The farm is located about three-fourths of a mile southerly from the New-Scotland Church, and about seven miles from the city of Albany, by a good road. It contains one hundred acres of land, of the very best quality for grass or dairy purposes. It is a good grain farm, but is peculiarly adapted to grass. It lies well and handsomely, as to exposure, roads, water, &c. It is all in a state of cultivation except a few acres of wood necessary for the farm; there is not three acres of waste land on it. The house is commodious and comfortable. The other buildings and fences are not as good as the farm would warrant, but are sufficient in number and size, and in tolerable repair. The premises will be sold in fee—free from quit or rent. Title good and terms easy. For further particulars, address either of the subscribers.

J. D. DEGRAFF, Fonda,
D. C. SMITH, Schenectady.

August 1—3f.

Executors of John J. Degraff, deceased.

Extensive Sale of Real Estate in Virginia.

ON the 10th day of November, 1851, will be sold to the highest bidder, in Williamsburgh, 2787 acres of land belonging to the estate of the late John Maupin, lying between said city and Jamestown: 350 acres of which are highly improved, also about 100 acres of the richest meadow. The other portion is abundantly studded with valuable oak and pine timber easily accessible by water, a part of which lies on a navigable creek, where is located the brick work of a once valuable manufacturing water mill, to which vessels may float, and which creek empties into James river, one mile distant therefrom. These lands will be sold in tracts to suit purchasers: also other real estate will then and there be sold, embracing most desirable houses and lots in said city and including a new and commodious brick store house and lot. See card published, and address Williamsburgh, Va.

R. H. ARMISTEAD,
Executor and Com.

Aug. 1—3f.

HORSE POWERS AND THRESHERS.

THE subscribers solicit the attention of the farming community, to their extensive assortment of unsurpassed Horse Powers and Threshers of all kinds now in use.

1st. The Endless Chain or Railway Power, both for one and two horses, guaranteed to be the best ever made, both for strength, durability, economy and utility, being constructed on scientific principles so as to avoid all friction possible, thereby making them the lightest running power in the United States.

2nd. The circular wrought Iron Power, calculated for one to six horses. A new and well approved article.

3d. Iron Sweep Powers of our own manufacture, for one to four horses, a first rate machine that has always given the best satisfaction.

4th. The Bogardus Power for one to four horses, a very compact machine and adapted to all kinds of work. They are made entirely of iron. In addition to the above, we have several other kinds of well approved powers, together with all the various kinds of under and over shot Threshing Machines ever made. Also the largest and most complete assortment of Agricultural and Horticultural Implements, Field and Garden seeds to be found in the Union, all of which will be sold upon the best terms and at the lowest prices. Persons in want of any of the above articles will find it greatly to their advantage to call on us before purchasing elsewhere.

JOHN MAYHER & CO.,

No. 197 Water street, New-York.

Aug. 1—1f.

I. T. GRANT & CO'S

Patent Fan Mills and Grain Cradles.

WE continue to manufacture these Celebrated Mills and Cradles.

Our Mills have been awarded seven First Premiums at the New-York State Fairs—three Silver Medals at the great American Institute in New-York—also at the State Fairs of Pennsylvania, Maryland, Michigan and Ohio, and at a large number of County Fairs. They have never been awarded the second premium—always the first, and they stand without a rival. We feel confident in recommending them as the best in market.

Our CRADLES have taken the First Premiums at two New-York State Fairs. We have made valuable improvements on them the last year, for which we have letters patent. They can be taken apart and packed in boxes, and put together again, with very little trouble, by almost any one.

Orders solicited from, and work sent to any part of the United States.

I. T. GRANT & CO.

May 1—e.o.m.—6f.

Junction P. O., Rens. Co., N. Y.

Bickford & Hoffman's Grain Drill.

THIS drill is made and sold by the subscribers, at Macedon, Wayne Co., N. Y. Of the large number which they have sold, not one has failed to give satisfaction. Decisive testimonials can be furnished from a great number of our best and most eminent farmers, that this drill is more perfect as a whole than any other of the many good ones which have been used in the country.

Since last year, we have added an IRON CASING to the gear work, to guard against the possibility of accident; the drill tubes are disposed alternately in parallel rows, sowing the grain in rows seven inches apart, and greatly facilitating the passage of the drill tubes among stones and clods. They sow with perfect evenness, whether on a level or ascending or descending a hill. Every part is made of the very best materials, and with great neatness and durability.

Of the great number sold, not one has been returned, although each is warranted to sow all kinds of grain with accuracy and with satisfaction to the purchaser. Subject to this warrant, we respectfully invite a free and full trial of the merits of this implement.

For an editorial notice and figure of this drill, see the June number of the Cultivator for this year, p. 209.

PRICES—\$65 for 7-tube drill; \$75 for 9-tube drill, and \$85 for 11-tube drill. All orders addressed to the subscribers, at Macedon, Wayne Co., N. Y., thankfully received and promptly attended to, and shipments made at canal or railroad. BICKFORD & HOFFMAN.

Macedon, Aug. 1, 1851—2f.

FOWLS AND EGGS.

THE great desire manifested in New-England for procuring good Poultry, has induced H. B. COFFIN, Newton, Mass., to pay particular attention to breeding and importing first rate stock. All persons desirous of having the purest and best to breed from, may depend upon being faithfully served. Among many kinds of Fowls for sale by him, are the following, which he is very particular in breeding.

Shanghai—Forbes stock.
Imperial Chinese—Marsh stock.
Cochin China—Coffin do
White Shanghai do do
Black Shanghai do do
Golden Poland, or Spangled Hamburg.

Dealers in Fowls or Eggs for hatching, supplied upon liberal terms. Orders addressed to No. 5 Congress Square, Boston, will be promptly executed.

Boston, Aug. 1, 1851—12f.

A New Volume of the American Phrenological Journal.

COMMENCES July 1, 1851. Now is the time to subscribe. Devoted to Phrenology, Physiology, Magnetism, Physiognomy, Mechanism, Education, Agriculture, the Natural Sciences, and General Intelligence, profusely illustrated: it cannot fail to interest every class of readers. Every family, and especially all young men and women, should have a copy. It is printed on the first of every month, at One Dollar a year. All letters should be post-paid, and directed to

FOWLERS & WELLS,

131 Nassau street, New-Yor

Aug. 1—2f.

Contents of this Number.

Agriculture of Ohio—Cultivation of Maize, by W. G. EDMONDSON,	280
Poultry and Poultry Books, by OBSERVER,	291
The Milk Establishment of GEO. E. ADAMS, by Hon. F. HOLBROOK,	294
Harvesting Indian Corn,	296
Show of the Royal Agricultural Society, by B. P. JOHNSON,	297
Cold Grape-Houses—the American Pomologist,	301
Rotting of the Cherry—Inquiries and Answers—Cincinnati Horticultural Society,	302
Horticulture not Forgotten—Qualities of new Strawberries—Hardy Pears—Remedy for Plant Lice—Protection against the Curculio,	303
Stewart's Patent Stump-puller—Suggestions—Information wanted,	304
Drag-Roller—Hereford Cattle,	305
Cultivation by Steam—Salt as Food for Plants—Virginia Lands,	306
American Plows in the Great Exhibition, by B. P. JOHNSON,	307
Science of Unimproved Farming, by Prof. J. P. NORTON,	309
Importation of French and German Merino Sheep, by Hon. F. HOLBROOK,	310
Cultivation of Cranberries, by F. B. FANCHER,	311
Rambouillet Sheep, by S. W. JEWETT—Average Yield of Wheat in New-York,	312
Answers to Inquiries—New Publications,	313
Notes for the Month—To Correspondents, &c.,	314
Cattle Shows and Fairs—State of the Market,	315

ILLUSTRATIONS.

Cold Grape-Houses,	301
Stewart's Patent Stump-Puller,	304

AGRICULTURAL IMPLEMENTS.

G. W. GIRTY.] Girty & Elliott, Cleveland, [F. R. ELLIOTT.

KEEP constantly on hand and for sale, the largest collection of Agricultural Implements in the Western States. Every new pattern and improved implement is obtained and offered for sale as soon as manufactured. Farmers need have no occasion to send East for we can furnish everything desirable that is contained in any Eastern collection. Cleveland O., Sept. 1—2t.

SEED WHEATS.

GOLDEN Australian, White Soules, Beaver Dam, White Flint, White Chaff Bearded and Mediterranean Seed Wheat, selected with care from fields where but the one variety was grown. For sale by Girty & Elliott, Cleveland, Ohio. Sept. 1—2t.

To Farmers.

THE advertiser offers for sale in fee, or on lease for 99 years, renewable forever, four farms—containing from 150 to 180 each—located in Baltimore county, Maryland, 20 miles from the city of Baltimore, on the York turnpike, and within one and a half miles of the Baltimore and Susquehanna railroad—all of them having been heavily limed, and producing annually fine crops of corn, wheat, and grass.

For further particulars address JOHN MERRYMAN, Jun'r, Hayfields, Cockeysville P. O., Baltimore county, Maryland. Sept. 1—1t.*

Devon Cattle at Auction.

I WILL sell at auction, the 11th day of September, the last day of the State Show at Middlebury, the following Devon Stock: One 3 year old Bull, bred by Stephen Atwood, of Connecticut. His grand sire and grand dam were imported. Two 7 year old cows, and one 2 year old heifer, all in calf; 3 heifer calves. One French Merino Buck, (perhaps two,) from Monsieur Cughnot's flock, the best in France. WM. R. SANFORD.

Orwell, Vt., Sept. 1—1t.

SPANISH FOWLS.

THE subscriber has for sale several pair of this beautiful breed of fowls, warranted pure. Specimens will be exhibited at the State Fair at Rochester. J. M. LOVETT. Albany, Sept. 1—1t.

FOR SALE.

FULL Blood Shanghae Fowls, from a stock imported in the ship Canada, direct from Shanghae in February last. All orders promptly executed. WM. BULL, Plymouth, Ct. Sept 1—2t.*

HORSE POWER.

UNRIVALLED Horse Powers of all kinds, guaranteed the best in the United States.

1. The Endless Chain or Railway Power, of our own manufacture, both single and double geered, for one and two horses. These have never been equalled by any other manufacturer for lightness in running, strength, durability and economy. They are universally approved wherever they have been tried.

2. The Bogardus Power, for one to four horses. These are compact and wholly of iron, and adapted to all kinds of work.

3. Eddy's circular wrought iron large Cog Wheels, for one to six horses. A new and favorite Power.

4. Trimble's iron sweep Power for one to four horses. Warren's

lito. A. B. ALLEN & CO., 189 & 191 Water street, New York. March 1—tf.

ELLWANGER & BARRY,

Mount Hope Garden and Nurseries, Rochester, N. Y.

WILL publish on first of August, a new wholesale price Catalogue, for fall of 1851, which will offer unusual inducements to purchasers of Nursery Stock in large quantities. Every person who intends purchasing in the ensuing fall, will find it to their advantage, (previous to sending their orders elsewhere) to be in possession of one of these catalogues, which will be furnished gratis to all post-paid applications or at the office. Rochester, N. Y., Aug. 1, 1851—2t.

TO FRUIT GROWERS.

FOR SALE by the subscriber, an extensive assortment of the best varieties of the Pear, Apple, Plum, Cherry and other Fruit Trees; also Ornamental Trees, Shrubs, Evergreens, &c. &c.

Tulips in upwards of 200 choice varieties. 50,000 Buckthorn plants for hedges, one, two, and three years from the seed.

Pear trees in a bearing state, and extra sized fruit trees, always for sale. Purchasers are invited to call and make their own selection. Sept. 1—2t. SAMUEL WALKER, Roxbury, Mass.

Apple Trees for Orchards,

For sale at the Nursery of J. J. THOMAS, Macedon, N. Y.

MANY thousand trees of large size, (mostly 7 to 9 feet,) and of handsome and thrifty growth, including the best standard sorts, and the best new varieties, and

All Propagated from Bearing or Proved Trees,

are offered for sale the present autumn, at Fifteen Dollars per hundred, or sixteen dollars if securely packed in wet moss and bound in strong mats, and delivered at canal or railway. The best selection of sorts will be made by the proprietor, in all cases where purchasers desire.

Also, an excellent assortment of proved and genuine Peach, Cherry, Plum, Pear, and Apricot Trees, Raspberries, Strawberries, &c., add a carefully selected collection of the finest Ornamental Trees, Shrubs, Hardy Roses, and Herbaceous Perennial plants.

All orders, accompanied with remittances, and directed Macedon, Wayne co., N. Y., will be carefully and promptly attended to. Sept. 1—2t.

New Staminate Strawberry.

WALKER'S SEEDLING.

THIS new variety of the Strawberry is for sale and will be sent out, to applicants in the spring of 1852, price one dollar per dozen. Orders may be addressed to Samuel Walker, Roxbury, or to Mr. Azell Bowditch, at the Massachusetts Horticultural Seed Store, School Street, Boston.

The Fruit Committee of the Massachusetts Horticultural Society, report of the variety as follows:—"WALKER'S SEEDLING;" this strawberry has now been fruited three years; it is a dark colored berry, of good size, a very abundant bearer, of high flavor, very fine quality, and it will be, it is believed an acquisition. It is a staminate, worthy, as the committee think, of an extended cultivation. Boston, June 28th, 1851.

Fruit, Ornamental and Evergreen trees, shrubs, &c., for sale at the nurseries of SAMUEL WALKER, Roxbury, Mass. Sept. 1—6t.

PREMIUM STRAWBERRIES.

WM. R. PRINCE & CO., Linnean Botanic Garden and Nursery, Flushing, near New-York.

THE following varieties, and others, at reduced rates, by the dozen or hundred, and Descriptive Catalogues sent to all post-paid applicants.

Charlotte, Crimson Pine, Primate, Profuse Scarlet, Primordian, Hovey's Seedling, Burr's New Pine, Iowa, Crimson Cone, Black Prince, Taylor's Seedling, Prolific Swainstone, Lizzie Randolph, Eustasia, Montevideo Pine, Brilliant, Cornucopia, Le Baron, Reifgent, Theresa, Unique Scarlet, Unique Prairie, Old Early Scarlet, Serena, and the Alpine varieties. W. R. PRINCE & CO. Sept. 1851—2t.

Wanted for the South,

A HORTICULTURIST who is experienced in his profession and can give satisfactory testimonials of his character. One with a small capital, or can bring with him a selected horticultural stock, will meet with a rare opportunity for investment, on application, post-paid, to the Editor of this Journal. Sept 1—1t.

THE CULTIVATOR

Is published on the first of each month, at Albany, N. Y., by

LUTHER TUCKER, PROPRIETOR.

LUTHER TUCKER & SANFORD HOWARD, Editors.

\$1 per Ann.—7 Copies for \$5—15 for \$10.

All subscriptions to commence with the volume, (the Jan. No.) and to be PAID IN ADVANCE.

ADVERTISEMENTS.—The charge for Advertisements is \$1 for 12 lines, for each insertion. No variation made from these terms.